JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS



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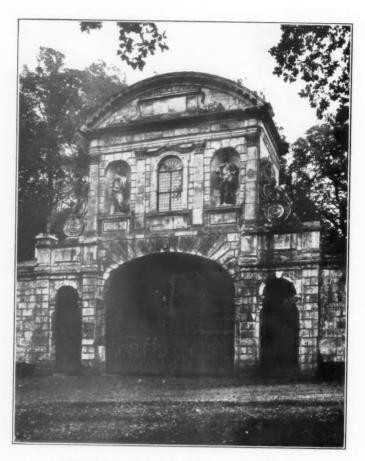
ARCHITECTS' BENEVOLENT SOCIETY

THIRD SERIES

17 JUNE 1933

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Temple Bar, Built by Joshua Marshall in 1670 From a photograph by Donald McLeish

The scrolled moulding over the central window, the swag soffit and the foliated volutes—odd, as though copied unintelligently from alternative designs—are characteristics of many monuments by him and his father

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Journal

Amongst the Birthday Honours were the following of special interest to members of the Institute.

Mr. J. C. Squire, an Hon. Associate of the Institute, who was one of the founders and also chairman of the Architecture Club, has been made a Knight Bachelor. As Editor of the *London Mercury* Mr. Squire has always taken a lively and sympathetic interest in architecture, and has been a protagonist in most of the recent battles over the preservation of historic buildings in London.

Mr. W. C. Eaton, Principal Assistant Secretary to the Board of Education, who represents that body on the Institute Board of Education, has been made a C.B., and Mr. Hugh John C. Marshall, O.B.E. [A.] has received the C.B.E.

Mr. H. S. Goodhart-Rendel, who has just been elected a Vice-President of the R.I.B.A., has been appointed Slade Professor of Fine Art at Oxford for a period of three years, from 3 October 1933. Mr. Goodhart-Rendel is the first architect to hold the Professorship.

At the Encaenia at Oxford on 21 June the honorary degree of D.C.L. will be conferred by the University on Sir Giles Gilbert Scott, President-Elect of the R.I.B.A.

Sir Raymond Unwin made full use of the opportunity that was given to him to tell the International Congress of Building Societies of the Value of Good Design in Dwellings. His paper, which we hope we may be able to publish in a forthcoming number of the JOURNAL, dealt briefly and cogently with the obligations of the Societies to further good design, and by this Sir Raymond clearly showed that more is meant than gables and imitation timber framing or tinted tiles. "The designer's conception of his work is, indeed, the precise opposite to that of trimming. For he is mainly concerned with the orderly and economical disposition of the parts; of the roads and buildings on the land; of the rooms in the dwellings, their shape and arrangement, and it is out of these that the form and external appearance directly develop."

Sir Raymond reminded his audience that the R.I.B.A. has a special low scale of fees for the design of houses for builders where the architect's responsibility ends with the design, and that this scale has been readjusted quite recently to meet special conditions. We were glad to see that this was taken up by several papers in the reports which they made of the paper, and we hope that it will have penetrated to the bodies at whom it was principally directed—the Building Societies themselves.

Building Societies are not primarily philanthropic bodies. They are business houses whose predominant interest must be to make a good financial deal. On this point Sir Raymond was no less definite in showing that good design pays. He stated that after careful comparison of a number of speculatively-built and architect-built houses he had found that the former cost on the average about 14s. 11d. per square foot, and the latter 14s. $5\frac{1}{2}d$. It was good or bad design, he said, that would fix the ultimate value of houses; it was good design which would inspire in the owners or tenants an affection for their dwelling, and in other folk a wish to buy them.

On a site in Aldwych the Building Centre has built a specimen pair of cottages to the design by Mr. N. E. Leeson, that won its recent competition for a £250 house. The actual cottages have been built at a cost of £225 each, or £900 for two pairs, and could be let for a rental of 10s. in London and the Southern Counties, and 8s. 6d. elsewhere. Anyone seeing them will doubtless be impressed both with their decent and reasonable appearance and with the extent to which the limited accommodation asked for has been provided with respect for amenity inside and out. Architects in London would do well to visit the cottages and also to pay a visit to the special Housing exhibition at the Building Centre which has been arranged by Miss Elizabeth Denby.

At its last meeting the Literature Committee received two notable additions to the many valuable gifts that the Library has received during the past year. Mr. H. L. Anderson [L.], son of T. MacVicar Anderson, who was President from 1888 to 1891, has presented to the Institute a magnificent copy of R. W. Billings's Antiquities of Durham, which was published in 1846, interleaved with about 60 of Billings's own beautiful watercolour and wash drawings. This volume originally belonged to William Burn, a great-uncle of the donor, who was one of the most substantial subscribers to the publication, and who probably possessed this special copy on that account.

Mr. Anderson has also given to the Institute two most interesting volumes of drawings of William Burn's own work. Burn, who was born in Edinburgh in 1789, came to London early in the nineteenth century as a pupil of Sir Robert Smirke, but soon returned to Scotland, where he practised until 1844, when he came again to London. Among his public buildings were the Theatre Royal, Edinburgh, and the Customs House, Greenock, which was one of his first works; one of his last was Montagu House in Whitehall Gardens for the Duke of Buccleuch

in 1862. In one volume, most of the drawings are of large private houses, or more accurately, perhaps, vast rambling palaces, monuments of wealth and aristocracy crystallised into architecture of the grandest and most accepted styles. Burn shared with Antony Salvin, his contemporary, many of whose drawings are in the Library, the lion's share of the aristocratic architecture of the first half of the nineteenth century. We are fortunate in having that age yet more completely represented by Mr. Anderson's valuable gift.

The other half of the century is represented by the second gift, which has come from Mr. Michael Waterhouse [A.], and Mr. Cedric Ripley [F.], who have presented a number of drawings of buildings by Alfred and Paul Waterhouse, both Past Presidents. Among these are large perspectives of the Manchester Assize Courts, the Natural History Museum, with two preliminary sketches, probably by Alfred Waterhouse himself, and a brilliant first sketch for Darlington Town Hall. There is also a perspective of Alfred Waterhouse's design for the Law Courts in London, and his own house at Yattendon, and perspective drawings of a number of Paul Waterhouse's buildings. Mr. Michael Waterhouse has also given on loan to the Institute several hundred letters from A.W. N. Pugin to J. D. Crace, the decorative artist, who executed to Pugin's design most of the textiles, furniture and wood carving for the Houses of Parliament, and in Pugin's own buildings. The correspondence is of considerable historical importance and we hope we may be able to write more on it later.

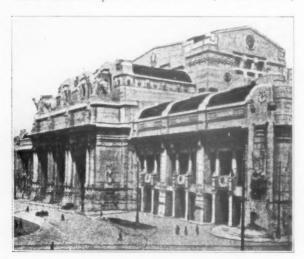
Opposing creeds in architecture are illustrated in an amusingly vivid way by the pictures of two Italian Railway stations printed on this page. That on the left, the terminal station at Milan, was built about three years ago. Mr. Goodhart-Rendel, in his paper on Modern European Architecture said, of this station,

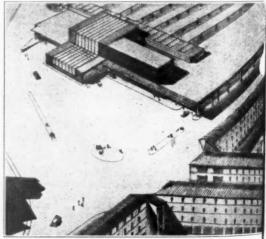
"it has gusto, it has bravery, it is executed with skill if it does not look particularly like a station its architecture at any rate obviously belongs to the railway age... This is the sort of thing that the very young architects of Europe have determined that they won't nave—and have determined it so nearly unanimously that it is no good arguing about it."

The picture on the right of the winning design in a competition for the new terminal at Florence represents perhaps the kind of thing that the young architects have determined that they will have; here is no less gusto and no less bravery, but infinitely more railwaymore consciousness perhaps of civic rather than individual importance. The interesting thing is that four or five years ago the style of the Milan station surprised no one and was indeed much what we would have expected, while the Florence station would then have been the dream of a distant future. Milan, the city of industry, where we might have expected modernism, decided for tradition, or what Mr. Frederic Towndrow has recently described as the "götterdämmerung style": Florence, the city of Art, has been more surely tradition in its willingness to accept the implications of ne. demands.

Members are reminded that another dance is being held in the Institute Galleries on Monday, 26 June, at 9 o'clock, for which tickets, price 6s. each, can be obtained from the Secretary, 9 Conduit Street, or through any member of the Institute. The gallery is being decorated by Miss Mary Adshead so that the setting may be appropriate to the gaiety of the occasion.

Success depends almost entirely upon a good attend ance, so we hope that all the people who came last time, as well as many who did not, will come this time and help to make the dance as gay and amusing as the last.





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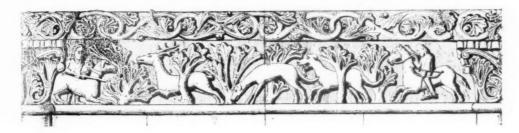
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THE INTERPRETATION OF PHOTOGRAPHS Part I

THE GEOMETRICAL PRINCIPLES OF PHOTOGRAPHIC PROJECTION

BY J. M. WALDRAM, B.Sc., F.Inst.P. [L.]

INTRODUCTION

N order to read photographs correctly a clear and accurate conception of the geometrical principles of photographic projection is essential.

In seeking information as to this the surveyor naturally turns to the geometry of perspective projection, which produces from particulars of plan, elevation and section the same picture as would be given by a camera if and

when the object depicted came into being.

Unfortunately, perspective drawing as practised by architects is mainly concerned with making an effective picture, naturally enough with a minimum of work. Consequently the practice both of the writers and of the readers of text books on architectural perspective tends rather towards short cuts and simple rules directed to that end. The clear understanding of the basic principles is not essential, and is often forgotten. The drawing is made from a view point selected with regard to effectiveness, and is generally drawn freehand between

a few leading lines, the position of which is fixed by empirical rules derived from the full theory. In this way the mental point of view of the architectural draughtsman does not help him greatly in working backwards from a perspective in the form of a photograph of which neither the view point nor the perspective distance is known.

In general, however, it is possible to set up a true perspective projection by geometric methods which are quite simple; and such a projection has certain properties which render it valuable as a scaled record of the object shown. Still more valuable are these properties when the "perspective" is a photograph; for when a reasonably good lens is employed in which distortion is absent, the image is in true perspective; and a knowledge of the principles of perspective will enable a great deal of useful information to be gleaned, even when information is not available concerning the position from which the photograph is taken or the lens employed.

BASIS OF PERSPECTIVE PROJECTION

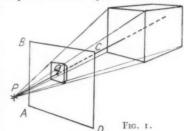
It is useful to remember that a perspective projection is in essence a polar projection, *i.e.*, one in which the object is delineated by means of angles taken from a fixed point. From a correct perspective, therefore, it is possible to obtain angles of bearing and elevation subtended at the view point by every point included in the perspective view.

The geometrical basis of a perspective can be seen most readily from a figure such as Fig. 1. Imagine a plane surface, transparent but capable of being drawn upon, such as A B C D; and let there be a point P at a small distance from the surface. If now lines are drawn from P to all points upon an object of which the perspective pro-

jection is required, then the point at which the line through P to a given point on the object intersects the

plane ABCD is the perspective projection of that point.

Evidently if the eye is placed at *P* and views simultaneously the object and its geometrical projection, the two will be seen to coincide;



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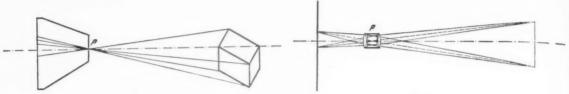


Fig. 3

and if the perspective has been drawn in sufficient detail the eye will receive an impression from viewing the perspective alone, similar to that received when viewing the object.

In the case of a photographic camera (Fig. 2), these conditions are fulfilled, with the difference that the plane surface is placed on the other side of the point P, and all light reaching the surface (i.e., the plate) is constrained to pass through P. In the simplest form of camera this is accomplished by making a pin-hole at P; in practical forms a lens system is used (Fig. 3) the effect of which is that light reaches the plate through a much larger aperture, but that it arrives on the plate in exactly the same

positions as it would have had a pin-hole been used. There is in every camera-lens system a point on the axis which can be regarded as the position of the equivalent pin-hole; but it is not necessarily at the centre of the lens mount and no attempt should be made to find it by measurement. Its distance from the plate when the lens is focussed at infinity is usually marked on the lens mount and is known as the equivalent focal length of the lens.

As a consequence to the plate being on the reverse side of the point P, the image is inverted, but it is obviously exactly similar to the image formed by the method of Fig. 1.

SOME EFFECTS OF PERSPECTIVE PROJECTION

It is to be noted in passing that there is only one position from which a perspective projection or a photograph can be viewed if the perspective is to have the same appearance as the object, namely, the point P. From any other point the appearance will be more or less distorted. It is generally imagined, for instance, that a photograph of a person taken from a close range when sitting on the ground with the feet towards the camera (Fig. 4) is badly distorted, for the feet appear disproportionately large and quite unnatural. Actually the perspective is correct, but in the small cameras usually used for taking such photographs the perspective distance, i.e., the focal length, is quite small-of the order of 10 cms,-and it is physically impossible with the unaided eye to view the photograph from such short distances. It is a most instructive experiment to view such a picture through the lens by which it was taken so that the eye is at the correct position. The picture will then appear extraordinarily lifelike and with a remarkable appearance of stereoscopic relief. This is shown to some extent in Fig. 5, where the picture should be viewed at about 3 in. from the paper, the eye being opposite the neck of the subject. A similar effect can

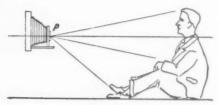


Fig. 4



Fig. 5

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often be seen at the edges of photographs taken with a short-focus wide-angle lens, and is not to be taken as evidence of distortion in the lens. Similarly small-scale book reproductions of large perspective views often exhibit what appear to be striking examples of inaccurate drawing. These disappear completely when the eye is brought nearer to the picture, *i.e.*, when the latter is viewed from a distance proportional to that from which the large-scale original would normally be viewed, and from which it was for that reason set out.

As was pointed out by the late Prof. Sylvanus Thompson, an eminent scientist who was also an artist of no mean ability, there is one point and one point only from which any picture should be viewed. Although architectural pictures exhibit the results of an incorrect view point more clearly than other subjects, it will be evident from the above that all subjects properly depicted are necessarily drawn in true perspective, and therefore there is only one point from which they can be seen as the artist saw them when he drew them in his picture.

When the eye is at the point P, the condition is fulfilled that it is necessary to look in exactly the same direction to see any point on the projection as it would have been necessary to look in order to see the correspond-

ing point on the object.

Interesting effects due to the same principle may also be observed in connection with telescope and field glasses. The effect of a telescope is really to magnify the perspective view seen by the eye, e.g., an object which normally subtends an angle of, say, 5° at the eye is caused to subtend an angle of, say, 25° in the case of a x 5 glass. This is equivalent to enlarging the size of the perspective projection, but not correspondingly increasing the distance of the eye from the picture plane; and the result is to increase the apparent size of objects

as regards their height and width, but to leave their depth unaltered. Very comical effects can be obtained if an approaching railway train is observed, preferably from a bridge, through a pair of high magnification field glasses. The locomotive and coaches are apparently one-eighth their normal length (in the case of a x 8 glass) and fitted with elliptical wheels; whilst in spite of the energetic rotation of the latter, the train proceeds at one-eighth of its normal speed over a track provided with sleepers apparently placed at every 3 inches. This illusion is well worth observing.

A similar effect is often seen in illustrations of cricket matches, and more particularly in cinema films. These are generally taken with a telephoto lens, which has the same effect as a telescope; with the result that the match is apparently played on a pitch some ten yards long, and the batsmen seem to mark time even during the

most thrilling run.

If the glasses are reversed, so as to reduce the size of the perspective projection, the reverse effect is obtained; speeds appear to be increased by the magnification of the glass, and distances measured away from the observer are likewise increased. Similar effects are seen

in a convex driving mirror.

This is the reason for the fact that through field glasses a landscape appears rather like a piece of stage scenery; trees, etc., being apparently cut out of card. The effect is also enhanced by the fact that the magnification of the binoculars increases the stereoscopic effect, so that the observer's power of perceiving depth by this means is increased and extends to, say, 1,000 ft., whereas it is normally indistinguishable beyond about 200 ft. The above appearance of landscape has been incorrectly attributed to the properties of lenses used in the telescope, which have as a matter of fact nothing to do with the effect at all.

GEOMETRICAL CONSTRUCTION OF PERSPECTIVES

Where data are in existence of the object viewed, and when the position of the view-point and the plane surface are known, the image can be drawn by geometrical methods. The plane ABCD in Fig. 1 is known as the plane of perspective, or picture plane; the distance of the point P from the plane (measured at right angles to the latter) is known as the perspective distance. In the case of photographs it is the same as the equivalent focal length of the camera lens. The point P is known as the viewpoint, and the point Q on the plane of perspective, at which the normal through P strikes the plane, is known as the centre of perspective. In most cases the plane of perspective is arranged to be vertical, but this is by no means always the case; and it is necessary to deal with perspectives in which the plane may be at any angle whatsoever. For convenience in description, however, a vertical picture plane will be assumed, but it will be realised that the same arguments will apply if the plane is not vertical.

The setting out of a perspective is performed by considering the system of object, picture plane, and viewpoint first in plan and then in side elevation. Considering the system on plan the distance of points on the projection are found to the right or left of the centre of perspective; and considering it in side elevation their distance above and below it.

From Fig. 6, illustrating the general geometric construction of a perspective, such vertical measurements of angles of bearing and elevation on a polar projection are indicated by methods which are self-evident. Other features of geometrical perspective shown in this figure

are dealt with later.

The majority of objects which appear on perspectives, especially in the case of buildings, are formed with straight edges, running for the most part parallel to three directions at right angles—e.g., horizontally and parallel to the return and vertically. In such cases certain rules apply which greatly simplify the construction of the drawing.

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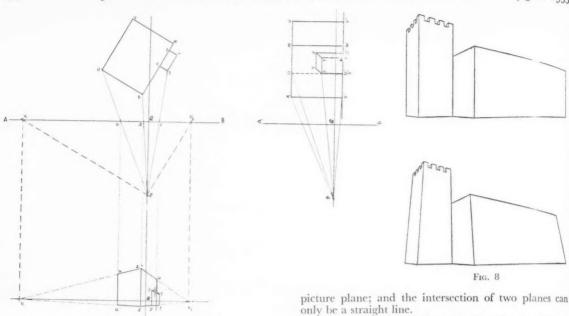
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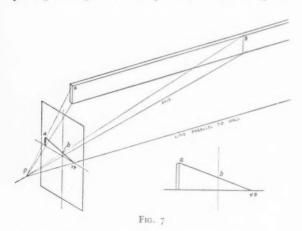
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Rule 1.—The perspective projection of any straight line is itself a straight line.

Fig. 6

This scarcely needs proof. Perhaps the simplest proof is that it is always possible to imagine a plane surface passing through the view-point and containing the



straight line in question. The perspective projection of the line is then the intersection of this plane with the

Rule 2.—The projection of any system of parallel straight lines is a series of straight lines which converges to a point.

If then two points on the projection of a straight line are fixed, the projection is fixed and can be drawn in.

For example, consider an infinitely long straight wall A, B... in Fig. 7. The projection of A is a; and that of B is b, etc.; and it will be clear that as points are considered which lie further and further along the wall, so their angles of elevation measured from P will become less and less, until for a point at infinity the angle of elevation will be O, however high the wall may be. The perspective projection of a point on the top of the wall at an infinite distance along it will be found by drawing a line through P parallel to the direction of the wall, when the intersection of this line with the plane of perspective gives the required point VP. This point will be the same for all lines which are parallel to the top of the wall, whatever their actual position-e.g., it will be the same for the top of the wall; for a course of brickwork halfway down the wall; or for the top of another parallel wall of a different height some distance away. It is known as the Vanishing Point; and the method of finding it is to draw a line from the view-point parallel to the direction of the lines on the object, when the intersection of this line with the picture plane gives the vanishing point. The two vanishing points V_1 and V_2 can be seen in Fig. 6, together with the lines PV1 and PV_2 used to find them.

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Rule 3.—When the lines on the object are parallel to the picture plane, the canishing point is at infinity—i.e., all the projections of such lines are parallel on the perspective.

The most usual case of this occurs with vertical lines when the picture plane is vertical. When this is so the projections of all vertical lines are themselves vertical; there is no "vertical vanishing point." For this reason it is very necessary in photographing architectural subjects that the plate should be held vertical, as otherwise all vertical lines in the photograph tend to converge (Fig. 8). This is an effect often seen in amateur photo-

graphs, where the photographer has tilted the camera to include a high portion of the building, instead of shifting the lens with a rising front and keeping the plate vertical. A photograph with such convergence is still in correct perspective, however, and is just as useful as one with the plate vertical so long as due account is taken of the fact.

A perspective of a building in which the picture plane is parallel to one face of the buildings shows all horizontal lines on that face as horizontal lines in the projection, which do not converge, however far the building may extend to the right or left. (See Fig. 9.)

FINDING THE CENTRE OF PERSPECTIVE OF ARCHITECTURAL PHOTOGRAPHS

It will be seen that when the picture plane is vertical the vanishing points of horizontal lines all lie on the horizontal through the centre of perspective. If the camera is tilted the vanishing points will lie on the horizontal line through the point on the photograph on the same level as the lens centre, while the centre of perspective will lie above or below by an amount equal to f tan ψ where f is the focal length and ψ is the angle of tilt from the vertical.

The method of finding the ψ is given in Appendix A. Since there are generally one or two vanishing points in any architectural photograph which can be found by continuing the projections of parallel courses of brickwork, gutters, cornices, string courses, etc., until they

intersect, the position of the centre of perspective can be located fairly accurately in the vertical direction. Owing to the use of a rising front it is frequently not in the centre of the print; and differences in trimming the print render any attempt to locate it from the edges very inaccurate. Another useful fact is that the projection of any horizontal line which is on a level with the camera lens is a horizontal line, whether the line on the object is parallel to the picture plane or not. If a brick wall appears in the photograph, running away from the camera, the level of the lens can be found since it is the same as the level of the course of brickwork which appears horizontal. (See Figs. 9 and 10.)

LINEAR SCALES OR PHOTOGRAPHS

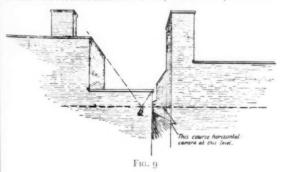
It will be noted that it is not a simple matter to apply a linear scale to a photograph, except to lines which are parallel to the plate. A good deal can, however, be found by using the principles of perspective discussed above—e.g., drawing lines through the proper vanishing points to represent parallels to some known line, and by counting brick or masonry courses wherever possible to obtain a vertical scale. A horizontal scale is, however, very difficult to construct and is rarely accurate unless for surfaces parallel to the plate.

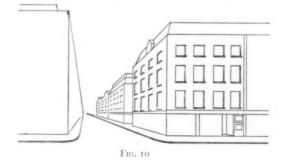
If the objects portrayed are considered to have uniform linear scales marked upon them the perspective view of such a uniform scale will not in general be itself uniform, except in the case where the length of the scale is parallel to the surface of the picture plane. This is generally the case with vertical dimensions. If, for instance, a vertical

feature on the corner of a building which is known to be 5 feet in height measures 1 inch on a photograph, then the scale of that vertical edge is 5 feet to the inch and applies uniformly right to the top of the wall. It does not necessarily apply, however, to any other vertical edge unless it is at the same *perp-ndicular* distance from the plate.

If a wall appears in the photograph which is parallel to the picture plane, then the horizontal and vertical scales are the same all over. This scale varies with the distance of the wall, and therefore a scale for the main face of a wall does not apply to a set back. This is the only case, however, in which a horizontal scale can be simply applied. In all other cases the scale is not uniformly divided and is difficult to determine.

The proof of the above statement follows immediately from the well-known properties of similar triangles.





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Part II

MEASUREMENTS FROM PHOTOGRAPHS

BY PERCY J. WALDRAM, F.S.I. [L.]

Ability to measure dimensions from photographic views can often be of the greatest assistance. Not only does it enable inaccessible objects to be surveyed, and that with a minimum of time and labour, but often photographs constitute the only available record of buildings which have been pulled down.

Rights of light, for example, in an existing building not infrequently depend upon the dimensions of windows in an older building which formerly occupied the site and was not measured up before demolition. Few things are more exasperating than to have most excellent photographs showing the old buildings or windows in the greatest detail, but to be unable to measure from them a single dimension of any material value.

Yet if only the photographer had taken the precaution to record the position and focal length of the



Fig. 11

lens used, and the direction of view, such photographs might well have been usefully informative.

The possibility of surveying by means of aerial photography has been well known since the war, but little or no attention has been given to similar potentialities in photographs taken in the ordinary way on the ground. Photographic surveying has, however, been practised for many years by specialist surveyors. Its main geometrical principles are simple, and can easily be traced through the theory of perspective, because a photograph is nothing more than a perspective drawn by the chemical action of light on a sensitive film.

There are many "systems" of perspective drawing, but they are all variants of the same simple operation.

A point of view P, Fig. 1, p. 609, having been decided upon, the draughtsman, by whatever "system" he works upon, virtually proceeds to measure graphically the angles of bearing and altitude subtended at the point P by salient points in the object depicted; and then, by means of those measured angles or their co-ordinates, to transfer each salient point to a "picture plane" situated at a fixed "perspective distance" P-Q from P; Q being a point on the picture plane at which a line from P is at right angles to the picture plane. In a photograph the perspective distance P-Q is the focal length of the lens used.

Every perspective projection or photograph being essentially a polar projection, *i.e.*, one in which the object is delineated by means of angles of bearing and elevation taken from a fixed point, it should be possible to deduce the angles of bearing and altitude with the axis of view *P-Q* subtended at the point of view *P* by every point included in the perspective picture.

If this can be done then one photograph, thus analysed, would obviously afford considerable useful information, whilst two or more of such analysed photographs would constitute what is virtually a trigonometrical survey from which many more dimensions can be ascertained.

As there is one position only in the picture for any object, whatever it may be, subtending at P given angles of bearing and altitude from the axis P-Q it should be possible to divide up any perspective picture constructed with the distance P-Q or any photographic picture taken with a lens of focal length f=P-Q by a series of lines representing constant angles of elevation crossed by another series of lines representing constant angles of bearing. This can most conveniently be effected by drawing such a web of lines on transparent material such as tracing paper or celluloid. Such a screen superimposed over a perspective or photograph, Fig. 11, would serve to determine the angles of elevation and bearing subtended at the point P by every part of the picture. The same screen

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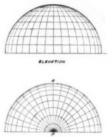
would r so be correct for every photograph taken with a lens of the same focal length f.

In the paper which first introduced the modern method of measuring or predetermining daylight factors by measuring areas of visible sky plotted on to suitable diagrams, or webs of angular co-ordinates (*Ill. Engineer* Vol. 16 April-May 1923) the authors suggested that the principles of photographic surveying might be applied to the survey of complicated or inaccessible obstructions as follows (p. 102):—

"For the rapid plotting of diagrams for existing buildings, where plans are not available, the following method was adopted with very satisfactory results. A quarterplate camera was used to give an image of the window and the obstructions on the focussing screen, the latter being so divided by pencil lines as to give the vertical and horizontal angular co-ordinates of the objects in the field of view. It is necessary to use a fixed focus to the camera, otherwise the scales will be incorrect. In use, the image was sketched from the focussing screen on to a piece of similarly divided graph paper and the diagram plotted from the sketch. By this means a complete diagram, showing far greater detail than could be obtained from plans and sections, can be drawn and measured in about twenty minutes.

"It would be feasible to use the camera for obtaining an actual photograph of the buildings, and, by means of a suitable mask, to incorporate with the prints the lines giving the vertical and horizontal angles,"

One method of obtaining screens of angular co-ordinates can readily be visualised if it be assumed that the photograph is taken from the centre of and through a skeleton wire cage forming a quartersphere of radius P-Q=f, as indicated in flat projection and plan in Fig. 12.



PLAN

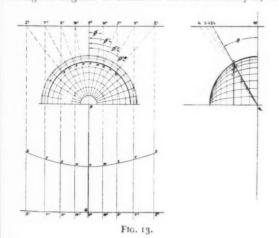
Fig. 12.

This cage may be regarded as a domical glass house of which the horizontal semi-circular glazing bars represent constant angles of elevation from the centre P and the bars radiating down from the zenith to the horizon represent constant angles of bearing from the direction P-Q.

But whatever can be photographed can also be drawn accurately in perspective, and as photography implies the construction of an accurate wire screen—to say nothing of focussing difficulties—it is far simpler to set up a true perspective view. Also such a perspective view can more easily be subdivided as closely as may be desirable.

SETTING OUT OF WEBS

The setting out of webs of angular co-ordinates as perspective views taken from the centre of an imaginary wire cage in three directions, horizontal, inclined at 45° and vertical, from accurate drawings of the cage, is indicated in Figs. 13, 14, 14a and 15. The resulting perspective views forming co-ordinate webs are shown in Figs. 16, 17 and 18. The perspective construction, Fig. 15, of the cage of angular co-ordinates viewed vertically is, of

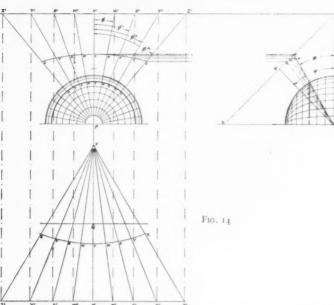


course, quite simple, the projected rings of co-ordinates of angles of elevation being circles and the radial co-ordinates straight line radii. The method shown in Fig. 14 of setting out perspective views with the axis of view inclined is obviously less laborious than the usual method shown in Fig. 14a.

In this connection it should be noted that the radius of the cage is quite immaterial, there being no difference in the perspective view from the centre of a tiny cage of a radius equal to the focal length of a camera and the perspective view of imaginary lines of celestial latitude and longitude traced on the sky.

The lines radiating from the zenith represent constant angles of bearing and will therefore become vertical in the perspective web viewed horizontally as Figs. 13 and 16. The curious hyperbolic form which the horizontal circular rings assume in true perspective when viewed horizontally will be seen approximately in the photograph, Fig. 19, of the new circular station at Arnos Grove, which is reproduced by the courtesy of the London Electric Railways and Messrs. Troughton & Young.

Although it is thus possible to set out by ordinary perspective a web of angular co-ordinates from the centre of an imaginary cage in any direction either horizontally, inclined at any angle, or vertically, it is preferable for accurate work to set out the curved lines of angular co-ordinates by means of exact ordinates obtained trigonometrically as described in Appendix B.



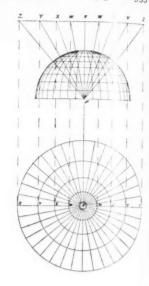


Fig. 15

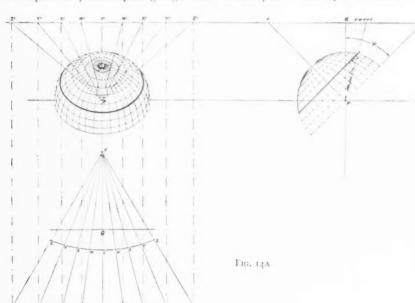
The reason for webs applicable to the conditions of the axis of view being inclined upwards at 45° and vertical is that even a wide angle photographic lens covers only a comparatively small opening angle either vertically or

horizontally. If therefore the instrument is to be capable of measuring any patch of visible sky, wherever it may be situated, it must be provided with webs applicable to as many directions as may be necessary to cover all parts of the sky between the horizon and the zenith.

If the opening angle of the photographic lens used be not less than 22½° on each side of the axis, then the 90° of elevation between the horizon and the zenith would be covered by views taken in three directions, upon which views the appropriate web can be superimposed.

As regards angles of bearing it will be obvious that all

As regards angles of bearing it will be obvious that all perspective views taken from the centre of the domical cage will be identical in all lateral directions at the same angle of vertical tilt. If therefore the total opening angle of the lens used be 45 or over, any object or view from the horizon to the zenith can be surveyed by a series of views in one or more of the three directions, horizontal, inclined at 45, and vertical.



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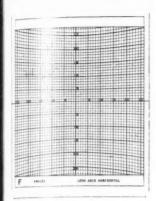


Fig. 16

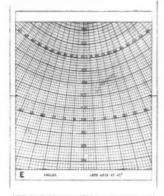


Fig. 17

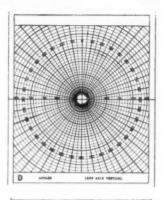


Fig. 18

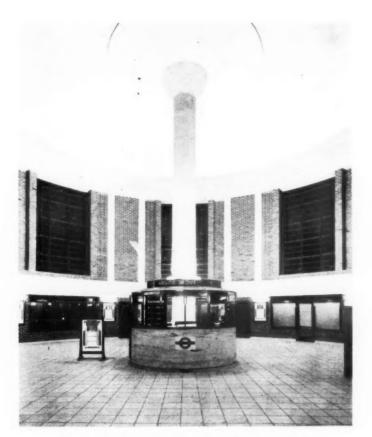


Fig. 19.—The Hall of Arnos Grove Underground Station Architects: Adams, Holden and Pearson

DAYLIGHT FACTOR WEBS

If perspective superimposing webs can be set out representing co-ordinates of elevation and bearing, then similar superimposing webs can also be set out for anything else which is determined by such angular co-ordinates. For example, areas of sky visible from a given position and capable of affording a given value of daylight illumination measured in daylight factor can be defined by the angular co-ordinates of the boundaries of such areas (*Ill. Engineer*, 1923, 16, and Technical Paper No. 7, D.S.I.R.). In the *Ill. Engineer*, December 1931, the writer published the device of dividing the

imposed over photographic views of visible sky given by a lens of the same focal length as that to which the perspective views of daylight factor area had been set out. By this means the total daylight factor of any area of sky visible from a point could be ascertained by the simple process of counting the squares superimposed over a photographic view of the visible sky. An instrument for exploring the daylight conditions of school classrooms, etc., on this principle was illustrated and subsequently exhibited at the Physical Society and the Royal Institution in 1932. As now made for the use of

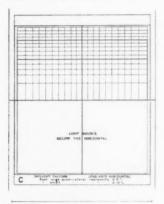


Fig. 20.

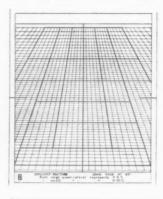


Fig. 21.

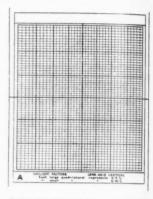


Fig. 22.

hemisphere of sky above the horizon into areas, each of which was capable of providing daylight illumination at the centre of the hemisphere, measurable by a given



Fig. 23.

value of daylight factor, and constructing perspective views of such areas on transparent material (Figs. 20, 21 and 22). Such "daylight factor webs" were super-

school inspectors and medical officers (Fig. 23) it resembles a camera with an ordinary ground glass focusing screen across which any appropriate perspective web, either of angular co-ordinates or of sky areas of known daylight factor value, printed on a roll film of transparent celluloid, can be traversed by the side winding screws across the ground glass focusing screen, and thus superimposed over the image of any sky visible from the position where the instrument is placed, e.g., a school desk.

The daylight factor webs used (Figs. 20, 21 and 22) are, of course, equally suitable for superimposing on photographic prints. Negatives or prints can be made through them (Fig. 24), as was suggested in 1923 for transparent masks or webs of angular co-ordinates.

Although before this suggestion was first published the device of forming daylight factor webs was patented (Patent No. 388,851) in connection with cameras and photographic survey instruments, this does not prevent anyone from constructing such webs for his own use by the method described above and using them in connection with ordinary photographs.

Their construction for any given focal length either by perspective, as in Figs. 13, 14 and 15, or trigonometrically, as in Appendix B, is not difficult, but it involves a certain amount of tedious accurate drawing, which could be avoided if it were possible to obtain, at

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Fig. 24



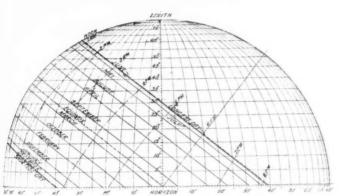


Fig. 25.—Apparent Solar Paths. Aspect West. Latitude 51° 30′ N.

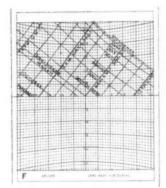


Fig. 25

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a reasonable cost, accurate webs for any given focal

The writer has therefore arranged to supply Messrs. B. J. Hall, of Dacre Street, Westminster, S.W., with copies of the master diagrams from which are produced the angle and daylight factor webs for any given focal length which are used in his own office, and to give Messrs. Hall the necessary licence to supply the daylight factor webs protected by the patent mentioned above. The webs generally used by the writer are of two kinds, both of which are produced photographically on glass and varnished, viz., (a) positives of black lines on a transparent ground for superimposing over photographs or perspectives, and (b) negatives of transparent lines on an opaque ground for printing webs on to untoned cr undeveloped photographic prints as Figs. 11 and 24.

The writer has found webs produced photographically on glass to be extremely accurate, reliable and convenient.

In this connection it should be noted that photographs through windows glazed with ordinary glass are liable to result in slightly distorted images which obviously cannot be measured accurately.

For very accurate work, therefore, the sashes should, if possible, be removed.

It is scarcely necessary to say that when photographing visible sky from interiors through windows, in order to measure angles or daylight factors, the ordinary precautions should be taken to avoid halation.

It is similarly easy to transfer the apparent sunpaths for typical dates and the lines dividing those paths into hourly periods of apparent travel as set out on any web of angular co-ordinates such as Fig. 25 to a perspective view of that web as Fig. 26 for superimposing on a photograph as Fig. 27.

It will be obvious, however, that any such web of apparent sunpaths would only be correct for one particular bearing, and that in view of the limited opening angles of photographic lenses, photographs upon which sunpaths could be measured would require to be limited to standard bearings, some of which would require to be duplicated or triplicated for the necessary additional angles of tilt such as would include all elevations of the apparent solar sunpaths. In view of the superior possibilities of the Beckett-Dufton pinhole camera (JOURNAL R.I.B.A., 10 September 1932, 39 (19), p. 782), which can cover all apparent sunpaths with one web, it is doubtful whether the measurement of insolation by the use of sunpath webs superimposed on ordinary photographs, although possible, is ever likely to be developed.

CAMERA MOUNTING

In all the photographic surveying instruments with which the writer is acquainted the camera is housed in a somewhat expensive mounting which enables the axis of view to be directed with precision in any desired direction as with a theodolite.

But to enable photographic views to be taken which can subsequently be analysed by superimposed screens, or photographed or printed through such screens, it is not necessary to have any form of theodolite mounting, at least for the usual view taken along a horizontal axis. Everything can be done with an ordinary camera.

The position of P of the lens having been fixed and the axis of view P-Q determined from which it is desired to be able to measure on the print angles of altitude and bearing, it is a comparatively simple matter to fix by ordinary measurement and levelling some obvious "registering" point in the field of view which shall be exactly on the predetermined axis P-Q, as, for example, at the same horizontal level as P and at the desired bearing.

The ground glass focusing screen of the camera can be marked with horizontal and vertical cross hairs or lines, the intersection of which represent the perspective centre of the picture upon which the point O on a screen of angular co-ordinates should register.

If the camera be then set up correctly at *P* and levelled horizontally the registering point in the picture should coincide with the intersection of the horizontal and vertical centre lines of the focusing screen.

To ensure that the subsequent photographic view has been taken without moving the camera, it is convenient to have small metal arrow heads fixed in the sides of the plate or film carrier, which will appear in the sides of the print as in Figs. 11, 24 and 27.

Vertical and horizontal lines through these arrow heads should intersect on the selected registering point.

A fairly obvious device for a registering point is the intersection of a light horizontal rod with a vertical rod on a suitable base to which it can be fixed at any desired height. If marked in black and white in 6 inch length; the rods can sometimes be used for direct measurements.

Another device for a registering point is a small bulb lamp carried in a clip sliding on a vertical rod in a convenient base and run off a pocket battery. A white chalk cross on a dark wall, or the top of a black 5 ft. measuring rod against light stonework, will often come out quite clearly in a print.

A small rubber "sucker" which can be pressed anywhere on the glass of a window is another obvious expedient.

But however interesting or even important it may be to know that if and when photographs are taken with proper precautions, duly recorded, they can easily be made to yield a great deal of valuable information otherwise unobtainable, yet until the value of such precautions becomes so generally recognised that endorsements of essential data may be expected on record photographs, it will be necessary, as heretofore, to interpret such photographs as are available without such data as best we can.

The typical record photograph may perhaps be endorsed with the name of the photographer, the date, and

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Fig. 28



Fig. 29

possibly with some indication, often irritatingly vague, of the position of the camera. But as to the focal length of the lens, its height, the axis of direction or the centre of perspective, whether a rising front were used, or any other essential data, the record is as a rule absolutely blank. Of course it sometimes happens that some permanent object in the foreground happens to coincide

vertically with some undisturbed object in the back-

KING'S STONE HOUSE HOGSMILL RIVER. DE G-'S FREMISES MESSAS C-- 9- M--PATH CLATTER'N BRIDGE TO MARKET PLACE. HIGH OLE COVER Lawa STA VIEW POINT. PILLER BOX Par PATH. Car VIEW POINT OF NOW PHOTOGRAPH CARDEN MUNICIPAL CFFICES Scaus. Fig. 30

ground-indicating that the lens was somewhere on a line joining the two. The intersection of lines joining two or more of such coincidences may enable the position of the lens on plan to be fixed, whilst the common vanishing point of horizontal brick or masonry courses may enable the height of the lens to be fixed. The view point P being then known on plan and section, the perspective distance or focal length can sometimes be deduced from the ratio of the known height of some feature or quoin of a building to its height on the print.

Fig. 28 is a case in point. The old wooden buildings had been demolished unmeasured and a new building erected as indicated in Fig. 29.

Questions as to rights of light rendered it necessary to obtain, if possible, particulars of the old obstructions to flank windows of the house on the right-hand side of the picture.

It will be noted that there are two objects in the foreground, a road manhole-cover and a curb edge numbered 1a and 2a, which appear in the print vertically under a distinctive feature of the bridge parapet and the edge of a chimney-stack. This enabled points on the payement numbered 1 and 2 to be located. String lines stretched from these points touching the edges of the curb and of the manhole-cover respectively intersected at a point on plan Fig. 30 which should have represented the position of the lens. This was checked as follows:

It will be noted that in the extreme left-hand top corner of the print the globe of a street-lighting lantern is included, the centre of the globe being in the print vertically over the right-hand reveals of the first- and second-floor windows of an adjoining building.

This enabled a third point No. 3 to be located on the pavement which was also joined by a string line with a point 3a below the street-lighting lantern, which latter fortunately proved to be in a position unaltered from the date endorsed on the photograph, except that it had

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been raised. A string line from 3 to 3a extended joined the common intersection of the string lines 1-1a and 2-2a exactly.

The print included several lines converging to vanishing points; some reliably horizontal in the form of brick courses, window heads, etc. These converged to vanishing points at the level of the horizontal line. This line proved to coincide with the bed joints of the top stones of the masonry quoins of the bridge parapet, and these joints proved on examination to be at the same horizontal level.

The bed joints were only 2 feet 10 inches above the pavement, which would have been a most improbable height for a camera lens. Levelling, however, proved that there was a fall of 2 feet 2 inches to the view point located by the string lines, giving a height of 5 feet above ground as the deduced height of the lens.

The height of all features on the two existing buildings at known distances from the ascertained view point being measurable, it was a simple matter to deduce the focal length of the lens employed.

A comparable photograph of the new building, Fig. 20. was taken from the ascertained view point which afforded a convenient comparison of the original and the new obstruction.

The heights of existing buildings deduced trigonometrically with superimposed angle webs proved to be correct within 2 inches. The approximate scale of the print being about 16 inch to a foot, this is as close as a web could be read on a print of that size, and the heights and bearing of all salient points of the old building were determined with close accuracy and agreed.

The foregoing combination of fortunate circumstances cannot be expected to occur with any frequency. Generally the print embodies very few clues from which it is possible to deduce sufficient data to enable screens to be used. Sometimes it affords none. But even in cases which are apparently hopeless it is sometimes possible by other means to obtain scraps of useful information which may occasionally be invaluable to anyone who has thoroughly grasped the geometrical principles of perspective.

APPENDIX A

TO FIND ANGLE OF TILT OF CAMERA

Convergence of parallel of vertical lines in a photographic print as in Fig. 8 is an indication that the camera has been tilted upwards as in Fig. 31(a) in order to include in the view the top of some lofty object.

(a)

The correct method of including the maximum height of

aspect, which avoids this convergence, is to keep the axis of view horizontal and to raise the level of the lens relative to the plate by means of the rising front as Fig. 31(b).

The effect of this is to raise the centre of the resulting perspective view above the middle of the plate. The angle of tilt can be found as follows:-

Consider the image reversed by the lens on the plate of a camera (Fig. 31(a)) of which the axis of view is tilted to an angle of \$\psi\$ from the horizontal, or the plate to an angle of & from the vertical. The vertical vanishing point V will occur at the intersection of the plane of the inclined plate with a line through the lens parallel to the vertical object, viz., at V.

$$f = QV \tan \psi$$
 and $QV = \frac{f}{\tan \psi}$

To find \$\psi\$ select two lines in the picture representing vertical objects as far apart as possible as in Fig. 32. Measure the angle & between them and the horizontal distance w between the lines at the centre of the perspective.

Then
$$\frac{w}{2} = QV \tan \frac{\beta}{2}$$
Or $\frac{w}{2 \tan \frac{\beta}{2}} = \frac{f}{\tan \psi}$
 $\tan \psi = \frac{f}{w} 2 \tan \frac{\beta}{2}$

For small values of β the value of 2 tan $\frac{\beta}{2}$ does not differ materially from tan \beta, and the angles can be written instead of their tangents. Therefore, for small angles of tilt, indicated by slight convergences of vertical lines in the photographic view, the equation may be taken without material error as-

$$\psi = \frac{f}{w}\beta$$

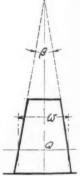


Fig. 32

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APPENDIX B

EXACT SETTING OUT OF WEBS

As the position of every point on a true geometrical perspective view of a cage of angular co-ordinates can be expressed as an exact trigonometrical function of the perspective distance P-Q, which in photographs is the focal length f, it is a comparatively simple, if somewhat tedious, matter to tabulate those functions, and to calculate exact co-ordinates for webs applicable to any views taken with a lens of given focal length f. CONSTRUCTION OF PERSPECTIVE WEB FOR VERTICAL PICTURE PLANE. WEBS OF ANGULAR CO-ORDINATES AXIS HORIZONTAL.

The horizontal dimensions QW', QX', QY', etc., Fig. 13, from the centre of perspective Q to the vertical lines representing angles of bearing ϕ , ϕ' , ϕ''' , ϕ''' , etc., are obviously the focal length f multiplied by $\tan \phi$, $\tan \phi'$, $\tan \phi''$, etc.

Consider a "ring" on the sphere representing an angle of elevation 0. The ordinate QV, which is the central ordinate to the perspective projection of the ring, is $PQ \tan \theta$ or $f \tan \theta$.

The ordinate of a point n the projection, such as W (Fig. 13), representing an elevation of 0 at an angle of bearing ϕ from the axis of perspective, is PW' tan 0. As PW'=fsec \phi the height of the ordinate of W is $f \tan \theta \sec \phi$.

From these two expressions the web of Fig. 13 can be set out to any desired accuracy.

CONSTRUCTION OF PERSPEC-TIVE WEB FOR INCLINED PICTURE PLANE

As shown in Appendix A, the vertical distance OV of the vanishing point V of vertical lines from the centre of perspective Q is $\frac{f}{}$ when ψ is the inclin-

ation of the picture plane

with the vertical or of the axis of view with the horizontal. In Fig. 33, if P be the centre of view and Q the centre of perspective, PQ being normal to the picture plane a b c d and PQ being f, the focal length of the lens; then $PA = f \sec \psi$. If an angle in bearing of ϕ be considered, then for an angle of elevation of oo the projection on the picture plane on the same horizontal plane as PA is w' and

 $Aw' = f \sec \psi \tan \phi$ Suppose the point w' corresponds to the foot of an infinitely high and vertical mast, then the projection of the mast will be a straight line passing through the vertical vanishing point. This is found by drawing a line parallel to the mast (i.e., vertical) through P to meet the plane in V. The projection of the mast is therefore w'V.

The similar lines for all angles of azimuth are set out by finding the position on Ac of the appropriate points x', y', z', etc., Figs. 14 and 14A, and joining to V.

The operation is similar to that with a vertical picture plane, the expressions f tan ϕ , f tan ϕ' , f tan ϕ'' , etc., becoming $f \sec \psi$ tan ϕ , $f \sec \psi$ tan ϕ'' , $f \sec \psi$ tan ϕ'' , etc.

Consider a section, Fig. 34, through the picture plane at right angles, and consider first angles of elevation directly in

front of the view-point P, i.e., in the plane of section. Then if an angle of elevation θ be considered, the corre-

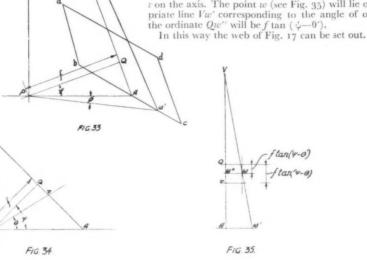
sponding point on the picture plane is v and the ordinate $Qv = f \tan (\psi - \theta)$. The ordinate to a point representing an elevation θ at a

bearing \$\phi\$ such as \$W\$ on Figs. 14 and 14A is obtained as follows:-The ordinate of a point representing an angle of elevation θ is greater if it occurs at an oblique bearing ϕ than if it occurs on the axis of perspective; thus the ordinate of an angle θ at an oblique bearing ϕ may be considered as equal to the ordinate of a greater angle 0' occurring on the axis of perspec-

The relation between 0 and 0' is given by

 $\tan \theta' = \tan \theta \sec \phi$ from which θ' can be computed.

Having found 0', the procedure is similar to that for the point v on the axis. The point w (see Fig. 35) will lie on the appropriate line Vw' corresponding to the angle of obliquity, and



Seventeenth-Century Buildings in Search of an Architect

I

BY PROFESSOR A. E. RICHARDSON, F.R.I.B.A.

R. GEOFFREY WEBB'S erudition provides just the right kind of stimulus needed for students of a dramatic period in architectural history. Had his brilliant paper been available thirty

years ago the study of this important phase of building would probably have been approached in a different spirit. It is, however, not too late to profit by the researches of a scholar who has shown the need for further investigation of this neglected field.

The six houses named in the lecture form only part of the contribution characteristic of the eventful years of the reign of Charles the First and the Commonwealth. Not only are their designs similar in general handling but they reveal a common source of inspiration. To Mr. Geoffrey Webb's provisional list should be added at least three other buildings of equal importance, namely, Furnival's Inn, Holborn; Craven House, Drury Lane, and Hall Barn, near Beaconsfield, all of which have long been demolished. A fourth building, Walden House, Huntingdon, fortunately stands. In each case the character of the plan and of the elevations

points to the direction of an architect of no ordinary ability, and one, moreover, familiar with Rubens's publication, the *Palazzi di Genova*, which first appeared in 1622.

So involved are the characteristics of this aforementioned group of buildings that it becomes necessary to view them through seventeenth-century spectacles; further, the social conditions should be briefly sketched and the position of the artificers made clear.

In those days the great body of the people worked on the land tending the plough. The looms of Norwich were active, and London and Bristol were gaining a new importance. While the masons shaped the Portland stone for the Banqueting Hall and Lincoln's Inn Chapel, the London brick kilns gave employment to hundreds; in addition, cargoes of special moulded bricks and

"clinkarts" were brought to the Thames in bluffbowed Dutch busses. Meanwhile carpenters and joiners worked their scantlings to accepted dimensions; glaziers, smiths, plumbers and plasterworkers pursued their respective crafts. repeating the lessons of apprenticeship and ofttimes reverting to Elizabethan whimsicalities. Independent of the journeymenwere the builders. the master masons and the statuaries recorded by Mrs. Esdaile. These include those skilled craftsmendesignerswho acting as architects, patched churches, added doorways to mansions, and placed dials on public buildings. Much more cannot be said, for the majority of the workers belonged to that numerous class whose fate it was to exist and pass unrecorded. In those exciting days, tempered with romance and drama, the rulers were engaged at Court or in the bustle of camps.

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SIR BALTHAZAR GERBIER D'OUVILLY

Patronage of artists then came from the King and the nobles and the art influences received from books and travel descended through the social strata in direct ratio to the building of palaces and mansions; for in architecture the lesser has almost invariably imitated the greater.

In early Stuart times history did not pause to record the habitations of the common people and it was not until the advent of Hollar and Loggan that interest in the pictorial aspect of towns became widespread. Yet a vernacular was developing—astrange medley of ornament and grotesque carving enriched much building in towns.

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Apart from the direction of the Court circle and the controlling genius of Inigo Jones, the general high level of building of the first class under the circumstances is all the more surprising. The criterion of the state of architectural design is found in the competency of those men to whom the erection of important private buildings was entrusted. Mr. Geoffrey Webb, whose pronouncements carry great weight, has named several instances and he has succeeded in shaking our faith in old beliefs. His suggestions regarding the six houses are in perfect accord with the parallel if extraneous influence to Inigo Jones's Palladianism, which is now recognised to be Genoese. If Mr. Geoffrey Webb's inferences are accepted, and in view of the external evidence they must be, then the authorship of these houses is placed beyond dispute. Still better, we are nearer the name of the mysterious architect of the houses in question, for it is inconceivable that either a busy statuary or a master mason, or even an underling in the employ of the Surveyor-General, would have had opportunity to undertake such important commissions. We are, moreover, not quite without the means of forming an opinion for ourselves apart from the vagueness of documentary evidence. Under Charles the First the arts were far from backward. The Duke of Buckingham and the Earl of Arundel, with their galleries of pictures and sculpture, it is known, had many imitators, and although as a body the country squires were illiterate and uncouth, the more enlightened were in a position to emulate the fashions of London. In 1636, following suggestions made years before by the Duke of Buckingham, but more likely in imitation of the French Academy, Charles the First established an institution called Museum Minervæ. The house of Sir Francis Kynaston in Covent Garden was selected, professors were appointed and rules drawn up. But, like most of the royal enterprises, this Academy was of no avail. In the previous reign a Commission on London Buildings had been set up; Mr. Geoffrey Webb is of the opinion that this meant the control of building "the promotion of a high standard in actual building materials and methods." improvement did result is evidenced in the rebuilding of property on the site of the mansion of the Lords Furnival and its transference to the Benchers of Lincoln's Inn. The exact date has yet to be verified. In all probability work was begun somewhere about 1636. (See illustration.) The treatment of the elevation to Holborn will be viewed as decidedly Genoese. The inclusion of a storey above the pilaster order, as well as the detail of the upper cornice with its strong modillions, differs from the manner of Inigo Jones. It is suggested that this building presents the case of an architect who was familiar with Rubens's illustrations of the Genoese palaces. The theory that the Surveyor-General was concerned in the work is untenable. At that time copies of Rubens's volumes were in many of the private libraries and evidence shows the extent of the European reputation gained by the painter during his seeming waste of energy in Genoa.

The true enthusiast for Genoese architecture now

appears in the person of Balthazar Gerbier D'Ouvilly of Antwerp. Born in 1591 he reached England as a retainer of the great Duke of Buckingham. At that time both the Duke and his artist factorum were comparatively young men, the Duke having unlimited wealth, Gerbier with nothing but his command of languages and a smattering of art. Before long, Gerbier became prominent in attendance on the Duke to Spain at the time of the fruitless negotiations for the treaty of marriage. He seems to have possessed some skill as a painter of small figures in distemper, but it was his knowledge of French, Spanish and Italian that served him best. In 1626 he was employed in Flanders to negotiate privately a treaty with Spain, the very treaty in which Rubens was commissioned on the part of the Infanta and for which end the great painter came to England. Gerbier now had opportunities at first hand to discuss architecture with the author of the drawings of the Genoese palaces; later he became his intimate friend. His first architectural work seems to have been for the Duke of Buckingham. He altered the state apartments at York House, advised on the decoration, planned the ballets mentioned by Bassompierre, the French Ambassador, "and invented a turning door, like those at the monasteries, which admitted only one at a time." In a letter dated 1628 it is said "the King and Queen were entertained at supper at Gerbier, the Duke's painter's house, which could not stand him in less than £1,000." After the assassination of Buckingham by Felton, Gerbier retained his position as a minor courtier. He was knighted at Hampton Court in 1628, and at the same time he was appointed Master of the Ceremonies and promised the reversion of the place of Surveyor-General after the death of Inigo Jones. But notwithstanding his credentials at Court and the fact that in 1641 he took the oaths of allegiance and supremacy, having a full bill of naturalisation, he failed to advance his interests as he had hoped and at last he began to seek for other means of living.

It is, therefore, more than likely that Gerbier found congenial employment as an architect between the years

1630 and 1647.

In 1648 Gerbier aspired to found an academy at Bethnal Green, which professed to be a continuation of the Museum Minervæ, but this, too, proved to be a failure.

Towards the end of the Commonwealth, Gerbier, migrated to Surinam, where he was persecuted by the Dutch and forced to return. But he was active enough at the age of seventy-two to design several triumphal arches for the Coronation of Charles the Second. His literary works, with the exception of Counsel and Advise to All Builders, published in 1663, have little value. Samuel Pepys remarks, May 28 1663: "At the Coffee-house in Exchange Alley I bought a little book, Counsell to Builders, by Sir Balth Gerbier. It is dedicated almost to all the men of any great condition in England, so that the Epistles are more than the book itself, and both it and them not worth a turd, that I am ashamed that I bought,

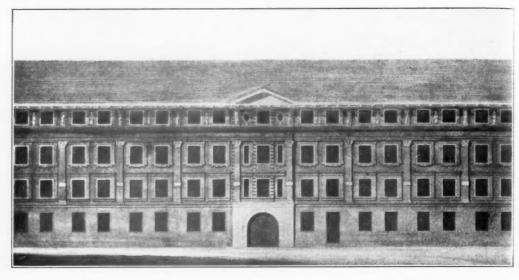
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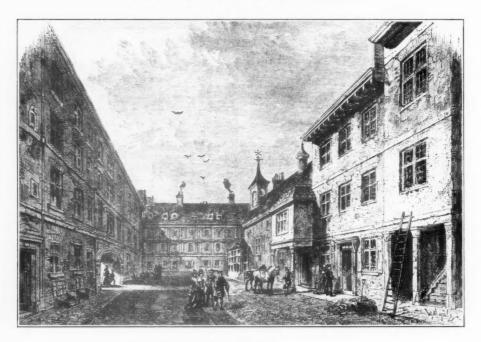
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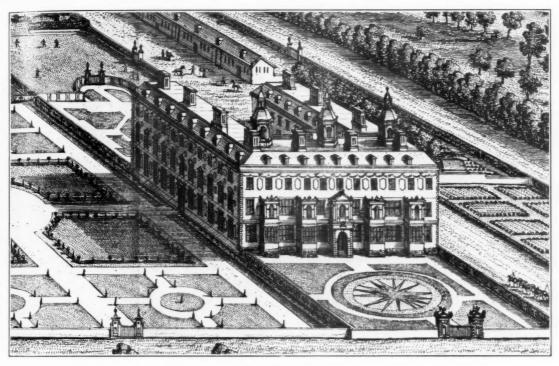
FURNIVAL'S INN
The exterior, from a drawing in the Soane Museum



FURNIVAL'S INN

The interior of the Courtyard from a woodcut in Thornbury's "Old and New London"

After an engraving by Nicholls, 1754



HAMPSTEAD MARSHALL

The view from Knyffe and Kip. Le Nouveau Théâtre de la Grande Bretagne. 1708

it." At a later date the Secretary collected a miscellaneous set of documents dealing with robes, crowns and arms of Emperors, Kings and Popes, Princes, Dukes and Counts, "blazonnès at eluminès par Balthazar Gerbier." The latter now form part of the collection at Magdalene College, Cambridge. Gerbier's other book, Brief Discourses Concerning the Three Chief Principles of Magnificent Building, 1662, was addressed to Charles the Second and to the Lords and Commons Assembled in Parliament. It appears that even at an advanced age he was still determined to make a last attempt to curry royal favour and to obtain commissions as an architect. In his second book, Counsel and Advise, 1663, the last dedication but one is to "Master William Wine," i.e., Captain William Winde of Bergen op Zoom, the pupil who assisted with the design of Hampstead Marshall for Lord Craven. This book, which caused Pepys to sneer, deserves more consideration from the student of to-day, particularly in regard to technical matters. In the first place the details of building practice as set forth throw considerable light on features which appear in the elevations and details of Mr. Geoffrey Webb's six houses. Not only does Gerbier show first-hand knowledge of construction and building procedure, but he draws attention to "Cornishes and Frontispieces over the Windows of a meer Habitation, being to it of the same use, as the broad Brim of a good Hat is to a Traveller in a rainy day." There is a quiet gibe at the buildings designed by John Webb in Queen Street, and a reference to paved floors which is especially interesting.

Further, there are remarks on prices, including the cost of "Scrowles to the said windows," which fits in with the scrolls to the windows at Cromwell House and Tyttenhanger. On page 13 of the "Discourses" published in 1662, Gerbier states, "A noble Paire of Staires should have a Cupelo, and no Windowes on the sides, which for the most part serve but for Rude and Unavised Men to break."

It can be submitted that the references to the trades are valuable as evidence to the matter in hand. We read of the finishing of windows with "Scrowles," the paving of ground floors with Portland and other stone, the finishing of staircases with cupolas in lieu of side windows, and the treatment of "Great Cornishes." All the foregoing coincide in a remarkable way with the details of the houses mentioned by Mr. Geoffrey Webb. The next

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procedure will be to sum up the case for Gerbier's connection with the architecture of the first half of the seventeenth century, more particularly the series of buildings erected between 1636-1655.

Dallaway states: "From that time, 1641, to the death of the King, I find no mention of him (Gerbier), though I do not doubt but a man of so supple and intriguing a nature, so universal an undertaker, did not lie still in times of such dark and busy complexion."

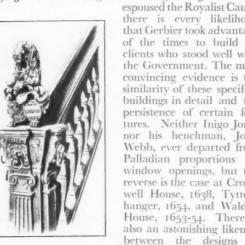
The points in Gerbier's favour as the architect we are seeking are varied. First it must be noted that he was in direct touch with Rubens during the painter's stay in England. He is known to have discussed Rubens's scheme for the decoration of the Banqueting Hall with the King.

He became the bosom friend of Rubens and was in Antwerp when the painter died. Soon after he sent over an inventory of Rubens's pictures and effects for the King's selection.

Secondly, he was envious of the consummate skill of Inigo Jones, and the esteem in which the latter was held at Court in his capacity as Surveyor General. It is clear that Gerbier missed no opportunity to say sly things about Inigo Jones's work. Thirdly, he appears the most likely person to have been in a position to imitate the Genoese manner, vide Rubens. Fourthly, there is his own suggestion, in his publication of 1663, of "a large worke" (with Copper Plates) which he did not live to publish. Could it have been his design to have produced something on the lines of Rubens's work?

Not only does Mr. Geoffrey Webb securely date the Genoese type to the years 1638-40, but there is room to believe that other houses built during the Commonwealth down to 1655 were the work of one man. While Inigo Jones was besieged at Basing and John Webb

espoused the Royalist Cause, there is every likelihood that Gerbier took advantage of the times to build for clients who stood well with the Government. The most convincing evidence is the similarity of these specified buildings in detail and the persistence of certain features. Neither Inigo Jones nor his henchman, John Webb, ever departed from Palladian proportions for window openings, but the reverse is the case at Cromwell House, 1638, Tyttenhanger, 1654, and Walden House, 1653-54. There is also an astonishing likeness between the designs of Thorpe Hall and Tyttenhanger, although allowance





THE INTERIOR OF THE COURTYARD OF RUBENS'S HOUSE, ANTWERP

must be made for the different material, i.e., stone in the one case and brick in the other. The heavy character of the pedimented window heads at Tyttenhanger indicates the designer to have been one who lifted detail from engravings, i.e., measuring proportions with a pair of dividers and fitting them to the design in hand. If Gerbier's Counsel and Advise to Builders is to be read literally, then the technical part of this scanty work exactly fits the construction of the houses under discussion. Comparison of these works with the descriptions in the despised little book almost suggests a specification. Walden House, Huntingdon, for example, has pavement in the ground floor rooms which answer Gerbier's requirements. The back elevation exhibits a brick pediment; the last of a series, which reveals the hand of the designer of Tyttenhanger. There are other details in this house, such as the staircase with the finials on the newels and the curious shapings to the modillions, which advance four inches beyond the corona of the main cornice, to suggest an architect not well versed in classicality. Reference to the angle treatment of Hall Barn near Beaconsfield, the residence of a contemporary poet, Waller, will reveal an illustration in Rubens's book. Even the cupolas which were prominent in those early designs may have been suggested by the solitary Genoese example drawn by Rubens.

At Cromwell House, the earliest of the Genoese group, which was built for Richard Sprignell, both the external and internal details coincide with Gerbier's artistic outlook. The Doric doorway has come straight from Rubens's illustrations. The unusually heavy cornice over this door bears out the simile to the "broad brim of a good Hat." The scrolls on either side of the first floor centre window are reminiscent of similar details in Antwerp. Although the roof was damaged in the fire of 1865 the cupola was reconstructed on the old lines. But the



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most builling problem has always been the staircase, which is neither Elizabethan nor Jacobean. The carved figures on the newels have always been supposed to represent Comwell's soldiers, but they were carved long before treton lived in the house for six months in 1648. Another explanation is that Richard Sprignell was a

captain of the London train band.

Remembering Gerbier's skill as a painter of small figures and his intimate knowledge of military affairs, it is possible that he was secretly commemorating the types of soldiers who fought under Gustavus Adolphus. Only a few years before, in 1632, William Craven, afterwards Lord Craven, had become the hero of Creutznach and his fame was known throughout Europe. Craven built Craven House in Drury Lane and is said to have been privately married to the Queen of Bohemia. He was created Viscount Craven in 1664, and before this employed Gerbier to build Hempstead Marshall. At Cromwell House the design of the military accoutrements in the balustradings to the staircase could only have come from the pencil of a designer with military knowledge. Such an one was Gerbier, to whom the Duke of Buckingham had entrusted the invention of the bombs which were to be employed at Rochelle. Gerbier himself states: "I employed therein of powder stone quarries, bombs, fire balls, chains and iron balls a double proportion to that used by the Duke of Parma according to the description thereof.

Reverting to the character of the finials to the newels, these answer most nearly to contemporary treatment of the same features in the mansions at Antwerp with which

presumably Gerbier was well acquainted.

While it is impossible to present a prima facie case as to the name of the architect who stalked Inigo Jones and Webb before and during the Civil Wars, Sir Balthazar Gerbier does seem the man for whom we are searching. In 1650 he delivered a lecture at his academy on Military Architecture, which he dedicated to Major-General Skippon with fulsome flattery. This can be submitted as evidence of the way the breeze was blowing.

Captain William Winde, or Wynne, the pupil of Gerbier, could not have appeared on the scene until the restoration of Charles the Second. He was first engaged with his master in 1662 at Hempstead Marshall, Berkshire, then building for Lord Craven. Gerbier died there in 1667, while the works were in progress. Among other works Winde designed Newcastle House, Lincoln's Inn Fields, Coombe Abbey (1667-95) for Lord Craven, and Buckingham House, the nucleus of Buckingham Palace in 1703. Previous to this he was engaged to build Cliefden, Bucks, for the second Duke of Buckingham. Later on Winde appears to have become friendly with Samuel Pepys, for he had a mourning ring of the value of 20s. at the funeral of the latter in 1703. It is also highly probable that Winde was the architect of Abingdon Town Hall.

It may here be noticed that the practice of painters taking up architecture in the seventeenth century was not

unusual. Rubens designed his own house, and between 1614-21 he designed the Jesuit Church of S. Carlo, Borromeo, at Antwerp. He is also credited with numerous other works. Rubens undoubtedly introduced a new spirit into English painting. Mr. Geoffrey Webb has shown that he was responsible for an important submovement in domestic architecture. It is equally clear that some interpreter of Rubens's architectural ideas existed after the painter's visit to England in 1629. All the available evidence points to Sir Balthazar Gerbier, whose skill we are told was pleasing to the great Duke of Buckingham. At York House he held the office as Master of the Horse, and by reason of his "several languages, good hand in writing and skill in sciences—as mathematics, architecture, drawing, painting, contriving of scenes, masques and entertainments for great princes: besides many secrets gained from divers rare persons." He made himself indispensable to his patron. It is not surprising on these counts that his thoughts turned to the Surveyorship, a post for which he was not exactly qualified. When we pass in review his subsequent disappointment, the death of his great patron, his failure to make headway at Court, the intervention of the Civil Wars, and the period of neglect in which he found himself at an advanced age, his eagerness to be considered an architect can be understood. Nevertheless, although Gerbier meditated great things and was destined to fulfil lesser, he was undoubtedly a man of artistic perception. His portrait by Vandyke shows a thoughtful face with keen, piercing eyes and the insolent mien of the courtier. By comparison with the portrait of Inigo Jones by the same artist there appears to be lacking the indomitable will power of a really great man.

Just this same difference of character exists between the authentic works of Inigo Jones and the six houses described by Mr. Geoffrey Webb. Perhaps the day will come when patient research will be rewarded by the sight of old documents which will produce more definite

conclusions.

Whatever the result of the controversy raised by Mr. Geoffrey Webb may be, his paper has led to a resurrection of Gerbier and his connection with the fine arts in the days of Charles the First and the gallant Duke of Buckingham. It is not generally known that Gerbier attended the sale of the King's pictures in 1651 and purchased the large picture of King Charles on horseback, by Sir Anthony Vandyke, which is now at Windsor Castle. Somewhere it has been written that Gerbier was the painter and the architect, and at the same time the confidential agent of Buckingham. That he was a leading actor in many scenes goes without saying. Of the Duke of Buckingham it has been said "he was not learned, yet he never wanted for knowledge; he supplied his deficiency by perpetually sifting and questioning well the most eminent for their experience and knowledge. The Duke certainly selected the right man in Gerbier. The real pivot to the Genoese movement in England was the Duke, who envisioned the proposals for a Spanish marriage which eventually brought Rubens to this country.

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By KATHARINE A. ESDAILE

Edward Marshall was born in 1598,¹ and was apparently apprenticed late, since he was not made free of his Company until 1626; he was either a pupil or an assistant of Nicholas Stone, and must have been a marked

his private life than that of other sculptors of the period. He was settled in Fetter Lane before 1632³, owned Barn Elms in 1659, when he advertised it as to be let,4 had his premises burnt down in the Fire, and built him-



Fig. 1.—Drayton's Tomb, Westminster Abbey

man, however, since he was elected to the Livery of his Company in 1632; in 1643 was Renter Warden, in 1647 Upper Warden, and in 1649-50 Master,² After his son Joshua took out the freedom of his Company in 1650, his name too begins to appear on monuments, and after 1660 Edward would almost seem to have retired from active practice in this field. We know more about

self new quarters on the site—the gardens and open spaces of Fetter Lane are mentioned by Aubrey—after a successful appeal to the Master of the Rolls for a new lease⁵. He lent his Company £300 for the rebuilding of their Hall, receiving a 51 years' lease of it as security; he married twice and had a vast family, of whom Joshua, the eldest of fourteen, alone survived him to succeed him

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"not only in his Office but in his Virtues," as his epitaph has it, and was buried, full of years and honours, in his parish church of St. Dunstan-in-the-West in 1675, where a monument erected by his son's widow commemorates them both.

He came in contact with many notable figures of the day. Aubrey mentions the bust of Drayton in the Abbey as his,6 and says he executed a bust of Quarles, since lost, out of his love for him; Howell ordered his father's tombstone of him in 16327 and left directions for his own to be done by "Mr. Marshall" in the Temple Church; Vaughan's allusion to "some rough statue from Fetter Lane" can only mean that he had been to this shop when in town; he made the monument of William Harvey at Hempstead, Essex, and Aubrey also tells us that he carried the bust of Inigo Jones from the monument in St. Benet's, Paul's Wharf, to his house for safety; though the rest, with its reliefs of Whitehall and the portico of Old St. Paul's, was left behind, and injured in the Fire, since it was only just legible in 1672. Now, as Webb, Inigo Jones's successor, wished Sir Justinian Isham to employ Marshall on a stately mantelpiece at Lamport,8 it seems certain that, like Nicholas Stone and other masons, Marshall was prepared to do decorative as well as monumental work; and his concern for Inigo's tombstone, which he may well have made himself, implies an interest in, and probably the practice of, architecture. May not Marshall have been the mason employed by Webb upon his country houses? He would hardly have written so strongly to Sir Justinian without personal knowledge of Marshall's work. Before we pass on to Marshall's monuments, a word may be said as to the early connection with Stone here suggested. Dugdale in his Warwickshire9 mentions that the effigies on the Verney monument at Compton Verney (after 1630) were by Marshall, and Dugdale's other ascription, that of Shakespeare's monument to Gerard Johnson, has been confirmed by subsequent research; therefore, though Stone himself does not mention the carver of these effigies, this does not invalidate Dugdale's statement, since he was a most careful collector of facts relating to his own county, and wrote in Marshall's lifetime. Moreover, Marshall's Cutts monument at Swavesey is identical in type "of the same modell," as Stone has it with Stone's Baldwin monument at Berkhampstead; 10 again, the one designed, the other executed, just as Stone himself had executed Sutton's monument after the designs of Nicholas Johnson;11 but Marshall's own designs cannot be mistaken for Stone's. His work falls into three principal classes, altar tombs with effigies, which are beside our purpose, though often most admirably beautiful; monuments with busts, such as Drayton Fig. 1), Harvey, Sir Richard Tufton (d. 1631) in Westminster Abbey, an excellent piece of work; and John Tufton (d. 1639) at All Saints', Maidstone (Fig. 2), a virtual duplicate of his kinsman's, save for the different portrait and the tiny recumbent figures of the young wives below. The Drayton is here illustrated to show the

architectural character of his very early work, the second Tufton to show his use of recessed Ionic columns and what I ventured to describe as the Tau cross moulding, which is almost universal in his mural monuments. The Tuftons we have noted; the James Palmer (Fig. 3) in St. Margaret's, Westminster, shows the moulding ending in foliated volutes; the Howell (one of many) shows the little swag of drapery which, like the larger swag of fruit, recurs again and again in his work; his Lucy Nethersole at Polesworth (1652) combines volutes with moulded side panels. Turning to Joshua's work we find one Gore monument at Gilston, Herts, with the Tau cross moulding, the other with great volutes; one of the Windsor series shows the moulding interrupted above the volutes; and the Brownlow monument at Belton, with its admirable half figure, has draped volutes and a fine series of architectural motives. And these are but examples of

scores of similar works elsewhere.12 We may take it that Joshua (1629-78) was apprenticed to his father; he would be out of his time in 1650, and in the next year or two his signature begins to appear on monuments. He was Warden of his Company in 1668-9, Master in 1670, the year in which he built Temple Bar, whose foliated volutes are a perfect example of the Marshall treatment of this detail (Frontispiece); worked for Wren on objects so various as the Dome of St. Paul's and the Abbey monument to the Princes in the Tower,13 and produced innumerable monuments, all of types used by his father, though his best known work is probably the pedestal of Charles I at Charing Cross. He was obviously a very rich man, dying possessed not only of his father's property in Fetter Lane and Whitefriars, but of other property in Leaden Hall, Cannon and Fenchurch Streets, at Royson, Walton-on-Thames and Chertsey, and like his father he was generous in his

legacies.

We must now deal with a singular episode in the history of the Marshalls. John Stone, on 11 June 1660, petitioned Charles II to grant him the post of Master Mason and Architect formerly held by his father Nicholas, emphasising his own service and his father's to the Crown, and adding, "There is a Pretender, one Mr. Marshall, to his [Stone's] Father's place who in no kind served your Matte." Marshall, on the other hand, petitions, as "Servant to his late Majesty for confirmation in the place granted him by the late King, of Master Mason in the Office of Works, having constantly endeavoured to promote His Majesty's interest in the late Common Council.¹⁵ Edward Marshall, that is, although Master Mason¹⁶ to Charles I¹⁷, had worked for the Commonwealth men in the City, and is obviously trying to make the best of it. The decision, referred to Secretary Nicholas, was a veritable judgment of Solomon. John Stone became Master Mason and Architect for Windsor,18 at a fee of 12d. a day, Edward Marshall Master Mason of all his Majesty's works at the same rate of pay, an office granted to his son Joshua in reversion in October, 1672, shortly after he had been appointed Master

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Mason and Architect to the King's buildings within the Honor and Castle of Windsor loco John Stone deceased."19

Now the six Masterless Houses mentioned by Mr. Webb in his recent paper are characterised by recessed columns, Tau cross mouldings and foliated volutes, characteristics which, as we have seen, appear on the monuments of both the Marshalls, to whom no domestic

Fig. 2.—John Tupton's Monument, at All Saints', Maidstone

work has yet been ascribed, though Edward was actually Master Mason to Charles I in close touch with John Webb, and filled with an especial reverence for Inigo Jones. All those six houses were built for Commonwealth men; Edward Marshall's connection with the Commonwealth party was hinted at by John Stone and admitted by himself; may it not be that, aided by his son Joshua, who came of age in 1650, he built these houses, so closely allied to his signed or documented works in another field? Nicholas Stone, William Stanton and the City mason Jasper Latham were architects as well as tomb-makers. Was not Edward Marshall, a fellow member of the Masons' Company, the same—and where, if not here, shall we find his domestic work?

¹ The D.N.B. date of 1578 is wrong.

² The tankard which he gave on this occasion bears the inscription "the Gift of Edward Marshall, Master 1649"; it is still in existence; in 1665 he presented a set of marble salts.

^a When Howell visited him.

4 Mercurius Politicus, May 5th, 1659, a reference discovered by Peter Cuningham.

B.M. Add. MSS. 5063, folio 170.

⁶ An earlier work, the monument of the Earl and Countess of Devonshire, is now lying dismembered in the crypt of All Saints',

7 "As I pass'd by St. Dunstan in Fleet Street the last Saturday, I stepp'd into a lapidary or stone-cutter's shop to treat with the master for a stone to be put upon my Father's Tomb." Letter to Mr. E. D. July 3, 1632. Somerset House Wills, Case 323.

⁹ R.I.B.A. Journal, January 1933, p. 175.

 Ed. 1765, IV, p. 791.
 Portions have been removed, but are still preserved. See H. C. Andrews in Walpole Soc. viii.

12 Walpole Soc. vii. p. 40. 13 His Brasses are irrelevant, but worthy of the most careful study; his monumental shrouded figures form another and rarer class of his work which must also be omitted here.

14 State Papers, Domestic, Chas. II, entry book 36, p. 533; Works Accounts, Office of Works, 1676-q.

 Malpole Soc. vivi, p. 29; cf. State Papers Dom. 1660-7, p. 48.
 State Papers Dom. 1660-1, p. 13.
 This is not the office held by Nicholas Stone. "Master Mason and Architect within the Honor and Castle of Windsor" was not the same office as "Master Mason of all His Majesty's Works and Buildings." Joshua, as we snau sec. com-18 State Papers Dom. 1660-7, p. 210. Joshua, as we shall see, combined both offices.

19 Ibid. 1672, pp. 397, 421.

Mr. Geoffrey Webb, to whom we have shown the articles by Professor A. E. Richardson and Mrs. Esdaile, has contributed the following note.

It would appear that there are two claimants to the honour of being the author of the six houses mentioned

in my paper published on May 27.

Professor Richardson's claimant, Sir Balthazar Gerbier, has in his favour his admitted friendship with Peter Paul Rubens, and his main interest in architecture, witness his book. Gerbier is one of the mysterious figures of the English seventeenth century, well worthy of the attention of the new kind of enterprising biographer. The facts about him contained in the Camden State papers are almost always sensational. Besides being a painter, he

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seems mainly to have been involved in diplomatic intrigue of a not very successful character. The unhappy man by this means managed to make himself unpopular with both parties, and this, I think, is important in relation to the matter in hand, for we have good evidence that in the 1650's, when three of our most important houses were being built, Gerbier was spending his time in Holland intriguing with both the Commonwealth and Royalist parties, and at the same time, with an energy unsurpassed even by modern research workers, writing tracts on economics and promoting companies for the exploitation of the West Indies. Professor Richardson suggests that Gerbier was "lying low during the '50's and thus might well have been engaged in architecture: the only form of lying Gerbier was emploved in during this time might well be described as "low"! I cannot think that he was in a position to do work which required such detailed attention as a house like Thorpe, which bears the mark of one hand throughout its very elaborate detail, both externally and internally. The most important of our six houses were built for eminent members of the Commonwealth party with whom Gerbier was hardly in good odour at the time. But one point in his favour is the similarity between the oriel windows of Hampstead Marshall and those of Thorpe House. The references in his book cited by Professor Richardson seem to be hardly specific enough to bear any important construction.



Fig. 3.—James Palmer's Tomb, St. Margaret's, Westminster



Fig. 4—North-East Corner of the Library, Thorpe Hall, Northants Refroduced by permission of "Country Life"

As to Mrs. Esdaile's candidate, the Marshalls, I think her contention that to anyone who has seen the series of Marshall monuments the general resemblance between them and the work of Thorpe and Tyttenhanger is quite striking, but further than that, though we do not find the half-pilaster supporting the lugged architrave, we do find similar columns used in that position and, in the Palmer monument in St. Margaret's, Westminster, a curious use of the foliated volute which has a close parallel in the library at Thorpe Hall. It may be remarked that further examples of this particular motive which are not mentioned in my paper are to be found in the North Drawing-room at Ham House, a work dating from before the Restoration.

earlier than the Lamport letters or the beginning of $\ensuremath{\mathsf{work}}$ at Thorpe.

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It might be suggested that we have little evidence of mason sculptors such as the Marshalls doing woodwork, but the reply might be made that Colt worked at Hatfield, that the Christmases are known to have been members of the Joiners' Company as well as stone sculptors, and, perhaps even more significant, that there is a strong resemblance to Stanton's manner in some of the doorways of Belton with which he is known to have been associated.

On general considerations Marshall is an ideal name for our purpose, for both father and son were in close contact with the Board of Works, as witness the petition at the Restoration cited by Mrs. Esdaile, from which, and from John Stone's petition we get a further suggestion that Marshall was in good standing with the Commonwealth party. He refers to his work on the City Council, presumably the City of London, and Stone refers to his having done no service, rather the reverse, to the Royalist party.

Lastly, the connection with John Webb established by the Lamport correspondence gives us a loophole to the awkward problem of the ceiling design at Thorpe, for there is reason to believe that the Webb drawing from which the Thorpe ceiling derives dates from considerably

In conclusion, it might be suggested that as far as earlier examples among the six houses are concerned the names of Edward Marshall and Sir Balthazar Gerbier are not mutually exclusive. As regards the latter works I think that Gerbier's activities for the Commonwealth and the fact that he died in the earlier part of 1663, not 1667 as Professor Richardson suggests (vide the Petition of his daughters for relief of their distress consequent upon his death, dated 1663), make it very unlikely that he had anything to do with the later examples among our six houses. The great value of Professor Richardson's contribution lies in his bringing to our notice the drawing at the Soane Museum of Furnival's Inn, and his mention of the other Genoese types of houses, Craven House, and Walden House, Huntingdon. I suggest very tentatively that Craven House, as illustrated in the Guildhall Graingerised Lysons may have been built before the Restoration, and one might also remark that Walden House was built in a nest of Commonwealth influence which links it very closely to the houses built for St. John. Thurloe, Blount, and the other members of the Commonwealth party.

Reviews

PROFESSOR ABERCROMBIE ON TOWN AND COUNTRY PLANNING*

A REVIEW BY E. MAXWELL FRY, A.R.I.B.A.

Town Planning is undergoing a rapid change, to be marked historically by the passing of the Town and Country Planning Act last year. For those who, like myself, are impatient to see architecture and town planning working together towards the regeneration of urban England, it may be pointed out that, bearing in mind the extent of the nineteenth-century cataclysm and the idealistic nature of much of the earlier planning, progress towards a complete realisation of the architectoric qualities of planning has been fairly rapid, and that exactly at the time for action, necessity has armed us with a new appreciation of economic law, and a new architecture has given us faith with which to work miracles.

Town planning in England, with the marked exception of the work of Professor Abercrombie, has found its province outside the towns, drawing its inspiration from the romantic architecture of mediaval cottage building. Though steadily moving away from its early ideals, it has not been able to reorientate its mental equipment until the pressure of recent years has brought us at last an Act of Parliament designed for the re-planning of town and country.

Although prepared in some way for the change, although even responsible for it, town planners must, by the very nature of the urban problem now presented, throw overboard a good deal of garden-city theory, or start upon the new programme in some confusion. Nothing short of a passion for urban design will serve to turn forthcoming opportunities to good account.

That is why it seems to me so very valuable that Professor Abercrombie should have written this book at this moment. He is an urbanist. For years he has interested himself in town structure, either through his work itself, his plans for Doncaster, Dublin, the East Kent coalfield towns and other places, or in his magnificent studies of European cities, which, appearing in early volumes of the *Town Planning Review*, give them a value impossible to over-estimate. Finally, he is an architect, and brings to everything he turns hand or brain to sense of order and fine design. Looking backward towards an age that possessed an architecture fit for every job, he is much the best guide to a future in which

^{*} Town and Country Planning. By Professor Patrick Abercrombie. M.A., F.R.I.B.A. Home University Library: Thornton Butterworth. Price 2s. 6d. net.

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so much that appears conflicting awaits solution by architects.

Few men could have compressed a complete review of the subject into 250 small pages without losing direction, for town planning, even within the last thirty years, has played many parts, serving the needs of peoples in every part of the world, but fulfilling itself nowhere completely; and as it is necessary to proper understanding to know what has been done in other countries, and in times past, it is all the more necessary to survey the whole contribution from the viewpoint of a designer, using the term in its highest sense.

Professor Abercrombie divides the book into three parts covering the background, *i.e.*, the history, the practice of town planning, and country planning and preservation. The historical section brings the story of town planning up to the present day with a masterly little chapter on international contributions to the subject. There is no attempt to present a picture of steady advance through the centuries, but one notes precisely where a new idea put into practice enlarges and deepens the meaning of planning, and can refer back, as every serious planner must, for corroboration and

The past then explains the present. The history of the nineteenth century gives a stronger meaning to the sociological element in modern town planning, which Wren's plan for London qualifies again by fine design and economic partition. It is this conscious interpenetration of history with practice that gives such significance to every chapter, such design and coherence in the whole.

Coming to modern practice, Professor Abercrombie tilts squarely at that beastly, face-saving, dry-as-dust word "amenity," which a legal draughtsman placed second in the Act's trinity of town planning postulates. "Beauty, Health and Convenience" is both a simpler and a truer definition, Beauty standing . . "first as . . . the quality which must run through the whole in order to lift sanitation and engineering to the level of civic design and the dignity of civic life." Beauty without health is wrong; beauty without convenience, that flies in the face of economies, is a useless charge; but these others without beauty are, like the bye-law street, only a slow form of death.

As a basis, this revised definition is wide enough to judge every varied contribution to modern practice described in the chapters that follow, and lead to the unfolding of the technique of planning—the survey, the plan, legal powers and persuasive planning. These chapters are too detailed for clear analysis; one can but quote at random.

Of housing: "It is interesting to speculate what might have been done if one or two million people out of the eight million who have been provided with detailed local residential planning in this country had had their housing made the subject of a really comprehensive plan. . . Post-war housing as regards a general theory of civic

planning does not show much advance upon the Victorian muddle."

Of housing again: "It is even possible that for the cheapest type of housing on *new* sites, for those cleared out of the slums, a tenement method—not necessarily lofty—will be adopted."

Of regional planning: "For a town of 50,000 to surround itself with a residential zone big enough for a million people with permissive use for almost anything, will lead to sporadic and formless growth almost anywhere within the area."

In the final chapters on the countryside, historic analysis removes a mass of misconception as to its naturalness or otherwise, and throws into proper perspective the landowners' place in the present process of disintegration and change. "If the country had remained in the hands of the same families who have done so much to create its typical English beauty in the past, it would have shown a few new roads, the electric pylons of the new grid . . and little else." For the rest, the planning of rural England, after the needs of the townsmen have been satisfied, must be done in conjunction with agriculture, the detailed planning of which "must come in the first place from within."

But under this generalisation come a throng of smaller matters: rural preservation, disfigurement, the control of the visiting townsman, his temporary and his permanent litter; the æsthetics of rural planning and design; the practice of Feng Shui, which I leave readers to discover for themselves; colour, the right proportion of which "to the quiet background of an English village is represented by a cricket ball in a cricket field," and much more beside.

I can indeed give only a small measure of the quantity and the richness of the material flowing from so few pages. That all this, with Professor Abercrombie's delightful illustrations, a good working bibliography and an index, should be available for two shillings and sixpence, is a great comfort that will help architects to take a hand in the regenerating work of the coming years.

THE BASILICA OF CONSTANTINE

A RESTORATION OF THE BASILICA OF CONSTANTINE ROME. By Anthony Minoprio, A.R.I.B.A. (Henry Jarvis Student, 1925). From the papers of the British School at Rome, Vol. XII—1933.

No English work of research in the form of a comprehensive Architectural reconstruction of a classical building has appeared in print since the competent contribution of Mr. M. A. Sisson in a previous issue of the Papers of the British School at Rome. With the present issue of the Papers we have Mr. Minoprio's work on a building the prominence of which, in actual bulk, in history, and in previous study, is all appealing. This new restoration comes somewhat soon after that of Messrs. Franklin and Hafner, of the American Academy in Rome (published in the Journal of American Institute of Architects in 1924), but comparison of the drawings of the two restorations shows considerable justification for a reconsideration of the problems involved. The difference in outlook is curious and striking. The Americans seem to have been chiefly obsessed

with the vulgar display side of the Roman Architecture of the Later Empire; in their version the walls are shown overladen with wrong period frescoes, there are many bronze grilles of differing patterns and scales, and the building is completely clothed externally with marble and so on. In all this some considerable imagination was brought to bear, but on the strictly scientific side of the problem and in the accuracy of the historical research in the sphere of field work, the previous restoration seems to be much lacking. Mr. Minoprio, on the other hand, is painstaking and accurate in his field work and in his exhaustive exploration of classical and later authorities; he does not hedge around complexities by a display of imaginative virtuosity to the end of an "amusing drawing." He is rather, in his final drawings of the restored building, a little too austere and restrained, a little too severe in his outlook upon a building which, after all, was rather of the type that belonged essentially to Imperial "boost."

Mr. Minoprio has corrected many mistakes of previous architects, he has assembled a case from the available facts which is throughout a reasonable one in explanation of the relation of the original Maxentian plan to that of the building as left by Constantine and as it has come down to us to-day. He has resolved a considerable amount of complexity with regard to the relation of the Basilica to the surrounding buildings; to, for example, the Forum Pacis and the Golden House of Nero. And he has pointed to the weak spots in the whole edifice of reasoning and assemblage, that is to the unexcavated ground at the North and North-East of the Basilica. I would suggest that in this connection he places a little too great a reliance on the plans of Ligorio which are sometimes proved to be fertile figments of

imagination.

Mr. Minoprio's drawings are excellent and are well reproduced in the Papers. He has, in addition to collaboration with the then Director of the British School, Mr. J. A. Richmond, on the archæological side, wisely collaborated with a sculptor in the work which centred round the colossal statue of Constantine, the remains of which are now in the Conservatori; the restoration of this statue as portrayed by Mr. Minoprio's drawings has a convincing air. The sculptor was the late Emile Jacot (Rome Scholar in 1925). Mr. Minoprio may be congratulated on a fine piece of work and the P.B.S.R. commended on the excellent way it has appeared in its pages. One of the original restoration drawings is shown in the architectural room of this year's Academy.

S. ROWLAND PIERCE [A].

HOUSES BY BAILLIE SCOTT & BERESFORD

Houses and Gardens. By M. H. Baillie Scott and A. E. Beresford. London: Architecture Illustrated, 1933. 21/-.

This book is in two parts. One consists of illustrations, showing houses designed or altered by Messrs. Baillie-Scott and Beresford over a period of some thirty years; and this is preceded by a section in which they discuss the principles and the problems of house building under headings such as "The Symbolism of Building," "Some Building Materials," "The Value of Precedent," "The Place of Building in Nature," "Furnishing," "Gardens," etc. There is also a useful section of "Notes on Illustrations."

Some day, perhaps, the cyclic progression of taste may bring us back to an enthusiasm for the more reminiscent domestic work of Edwardian times: but in the meanwhile I doubt whether this book will much interest the Bright Young People who are cheerily helping to evolve what is here described as the 'Brave New World of Speed, Glare and Noise.'' For its

authors are definitely Romantic; very happily and ery successfully so, by the standards of a time when the sig posts of Romance pointed backward to the past more often than, as now, forward to the future. And though their text contains much that is well and wisely said, it does not contribute much that is new, It also suffers from disconcerting la ses into facetiousness.

In any case, architectural theorising is notoriously unconvincing stuff, which-from Ruskin to Robert Byron-has always offered an easy target to the critic; so an author who not only ventures to theorise, but backs his principles by illustrations of his practice, must by his very courage command our

It is as a piece of architectural history that this book is of special value. Architects now in middle age will find it in reminders of the thrill with which many of us, as schoolboys, pored over lusciously coloured Studio illustrations of Baillie-Scott houses and decided that it would be great fun to be an architect. And perhaps the dominating thought, as one looks through it, is "What fun they've had!"

For here are people who loved designing picturesque houses with inglenooks; and they've been building them in quantities for thirty years, in all the best parts of England and in many other countries besides. The list includes a House in Peru; a House for the Queen of Roumania, in which each room had a different flower as the motif of its decoration; and a House in Poland, which had to be capable of defence against the bands of robbers which infested the neighbourhood. Was there not also a Palace at Hesse-Darmstadt, not illustrated here but wildly exciting (thirty years ago) in its decoration?

Only one house (completely half-timbered) in the U.S.A. is illustrated; and one feels that some story of conscientious heroism must lurk behind the fact that these masters of the Old English manner never developed a practice in a country where

they would assuredly have swept the board.

In all their work Baillie-Scott and Beresford have been educating both craftsmen and laymen in honest building methods and the sane use of materials. It may be doubted whether there are any of their contemporaries who have built so much all over England and done so little violence to its amenities. When the C.P.R.E. starts awarding medals to architects, they and Mr. Dawber may be close competitors. A. L. N. Russell.

CONCRETE PLAIN ROOFING TILES

BRITISH STANDARD SPECIFICATION

The British Standards Institution has issued a Standard Specification for Concrete Plain Roofing Tiles, which may be obtained from the B.S.I. Publication Department, 28 Victoria Street, S.W.1, at 2s. 2d. (including postage)

Several hundreds of tiles were tested both by the manufacturers and by the Building Research Station, and as a result a simple form of testing apparatus has been designed which can

be used by anyone.

As an instance of the average breaking load, it may be mentioned that a tile $6\frac{1}{2}$ in. wide must withstand along its width when wet 90 lb., and when dry 125 lb.

The Specification is designed to cover plain tiles only. A separate B.S. Specification is in course of preparation dealing

with interlocking and large tiles.

The Specification allows any surface, texture or colour desired by the purchaser, and an important feature is that it is required that the body of the tile shall be of such a colour throughout that, in the event of injury to the surface, the exposed body of the tile shall not set up an unpleasing contrast.

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The sizes of tiles standardised are 10½ in. by 6½ in. to 10½ in. by 63 in. and 11 in. by 7 in., while the thickness is not less than in at the centre cross section, tapering towards the head and tail to a minimum thickness of 3 in.

R. J. ANGEL [F.]

WOOD PRESERVATION

JOURNAL OF THE BRITISH WOOD PRESERVING ASSOCIATION. Vol. II. Lond. (166 Piccadilly, W.1). 1932. 7s. 6d.

The second volume of this Journal, recently issued, should receive the attention of architects as it contains a good deal of useful informa-

ion not easily available as far as we are aware.

The first article is the report of a lecture upon "the Structure of Wood" by Dr. L. Chalk, of Oxford. This lecture is illustrated in the Wood" by Dr. L. Chalk, of Oxford. This lecture is illustrated in the journal, is followed by a discussion, and leads up quite appropriately to the report of a lecture upon "Diseases of Timber" read last January at a meeting of the Auctioneers and Estate Agents Institute by Mr. K. St. G. Cartwright, mycologist at the Forest Products Research Laboratory, Princes Risborough.

This lecture, which was also followed by a good discussion, dealt with the typical life cycle of a distinctive wood fungus, the classification of the control of the contr

tion of wood diseases, their characteristics and means of identification,

He referred to the experimental house which has been erected at Princes Risborough, which has been deliberately infected with dry rot. When the disease is more firmly established attempts are to be made to find a method of effectively sterilising the infected timber. From this and other points mentioned by the lecturer it appears that newground is being broken in this important research, which raises our hopes that the new edition of *Dry Rot in Wood*, produced in 1928

by the Forest Products Research Laboratory and others, which we understand is to appear shortly, will be even more useful to architects than the last.

The discussion reported upon "the fireproofing of timber" gives much unusual and valuable information collected into a small space: it is the writer's experience that until recently many and various odd scraps of knowledge almost essential for the architect in carrying on an exacting practice is only to be found, after considerable labour, British Wood Preserving Association.

Happily, much of this information is now indexed and codified ready for architects in the Building Science Abstracts compiled at the Building Research station at Watford.

W. E. VERNON CROMPTON [F.!

Civil Engineering Specifications and Quantities. By G. S. Coleman and G. M. Flood. 2nd Ed. London: Longmans, Green and Co. 1932. 12s. 6d.

This is a most valuable work on the subject of Specifications and Quantities. It presents in a relatively small volume chapters packed with information essential to the Civil Engineer. No aspect of the engineer's activities is omitted, from his duties, authority, and liabilities to his work in connection with Ministry of Health inquiries and the promotion of Parliamentary Private Bills. There are five appendices, including one on British Engineering Standards, and another on aluminous, rapid hardening, and special cements.

The chapters on material and construction should be read by all engaged in building work. They contain a fund of information, stated at once succulently and lucidly, qualities too seldom found in conjunction. Indeed, the whole book should be in the hands of the architect as well as the engineer. The authors are to be congratulated on this second edition of their

ACCESSIONS TO THE LIBRARY

1932-1933-VII

INCORPORATING

Notes on Recent Purchases

These Notes are published without prejudice to a further and more detailed criticism.)

Lists of all books, pamphlets, drawings and photographs presented to, or purchased by, the Library are published periodically. It is suggested that members who wish to be in close touch with the development of the Library should make a point of retaining these lists for reference.

Books presented by Publisher or Author marked Books purchased marked
*Books of which one copy at least is in the Loan Library.

ARCHITECTURE

AESTHETICS

Towndrow (Frederic) *Architecture in the balance

8", x-177 pp. London: Chatto and Windus. 1933. 7s. 6d. R.

PRESERVATION

SOCIETY FOR THE PROTECTION OF ANCIENT BUILDINGS

The Society have completed for us our set of their annual reports, 1878 to date, with the exception of the years 1885, 1904, 1912, 1913 and 1919, which are out of print.

KNAPP-FISHER (A. B.) What London might be. A lecture delivered at the R.I.B.A. 12 April 1933. (In Lecture Recorder, May 1933.)
Q. pam. 10". London. 1933. 3d. R.

VICTORIA AND ALBERT MUSEUM

A picture book of Roman alphabets.

Batsford (Publisher)

pam. 71". London. 1933. 6d. R.

Lettering old and new. (Translated from the German by Dr. W. E. Walz.) With sections on its historical development and on industrial applications.

fo. 13½", vii pp. and 80 pls. London : Batsford. [193-.] £1 12s. P.

Acts

LONDON COUNTY COUNCIL. [BUILDING.]

London Building Act, 1930. Code of practice for the use of structural steel and other materials in buildings. No. 2909.
pam. 7". London: L.C.C. 1932. 6d. P.

BUILDING TYPES

(CIVIL)

Building, Journal

* Civic architecture reference number, April 1931.

Q. 12". 76 pp. London. 1931. 1s. R. Margold (E. J.), editor

* Bauten der Volkserziehung und Volksgesundheit. Q. 11 $\frac{3}{4}$ ". [12] +363 pp. Berlin: E. Pollak. (1930.) £3 10s. P.

HOME OFFICE

Welfare pamphlet No. 5. Ventilation of factories and workshops. 2nd ed. pam. 93". London: H.M.S.O. 1933. 1s. P.

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WOLFF (JEREMIE)

L'Hôtel superbe de la ville d'Augsbourg représenté en xvi différentes vues extérieures et principalement intérieures, etc.

oblong fo. i p.+16 pls. Augsbourg. 1732.

Presented by Mr. C. W. Statham [A.].

Text in French and German.

ARCHITECTURE, Journal

* Ice rinks. (Architecture, vol. viii, no. 42. Jan.-Feb. 1930.) Q. 12\frac{1}{2}. 32 pp. London: The Builder. 1930. 1s. R.

ARCHITECTURE, Journal

* Swimming baths. (Architecture, vol. ix, no. 48. March-April 931.)
Q. 12\frac{1}{2}. London: The Builder. 1931. 1s. R. ARCHITECTURE, Journal

* Club houses. (Architecture, vol. ix, no. 50, July-Aug. 1931.) Q. 12½". London: The Builder. 1931. Is. R.

(ECCLESIASTICAL)

Johnston (Philip Mainwaring)

Witley and Thursley churches recent discoveries. [Reprint from Surrey Archæological Collections, vol. 39. 1931.]
pam. 8½". [1932.] Presented by the author,

ESSEX ARCHEOLOGICAL SOCIETY

Hockley, Prittlewell and Southchurch. (Quarterly meeting and excursion [of the Society] September 1931.) [Reprint from the Transactions of the Society. Vol. xx, Part 2.]

pam. 81". [1932.] Presented by Mr. P. M. Johnston [F.].

KNIGHT (C. B. H.)

The story of Chingford old church.

рат. 7½". London: Crypt House Press. 1932. 1s. P. Atkinson (Тномая Dinham)

An Architectural history of the Benedictine monastery of Saint Etheldreda at Ely.

2 vols. (1 text and 1 p. fo, plans). fo. 13". Cambridge: University Press. 1933. £5 5s. R.

MURRELL (H. F.) and PIGOTT (R. M.)

Modern Sunday school buildings 94". 24 pp. and 5 folding plans. London: National Sunday School Union. 5s. P.

(EDUCATIONAL)

NATIONAL UNION OF TEACHERS

School buildings. By John Sargent and A. H. Seymour. pam. 93". 1932. Presented by the Union.

Association of Technical Institutions

Some observations upon modern buildings for technical education. By E. W. B. Scott. (Paper read at the annual general meeting, pam. 81". Loughborough. 1933. 6d. R. February 1933.) WITKIEWICZ-KOSZCZYC (JAN) Architekt

Budowa gmachu bibljotecznego wyzszej szkoly handlowej w

fo. pam. 134". Warsaw: Wyzszej szkoly Handlowej. 1933. R. The pamphlet illustrates a high school library in Warsaw, the work of Jan Witkiewicz-Koszczyc, architect of the Warsaw Public

The second part of the work is the report of a lecture given by the same architect on the construction of library buildings, delivered at a library conference at Warsaw in 1931.

The text is in Polish, but a short résumé is given in French.

(Domestic)

ADDY (SIDNEY OLDALL)

* The evolution of the English house. Revised and enlarged from the author's notes by John Summerson.

81". 252 pp. London: Allen & Unwin. 1933. 128. 6d. R. & P

NATIONAL HOUSING AND TOWN PLANNING COUNCIL

Housing policy. (Correspondence between the Ministry of Health and the National Housing and Town Planning Council. fo. pam. 13". London. 1933. R.

NATIONAL HOUSING AND TOWN PLANNING COUNCIL

Memorandum upon the general housing situation in England and Wales and the effects of the housing (Financial provisions) Act, April 1933. By John G. Martin. fo. pam. 13". London. 1933. R. MINISTRY OF HEALTH [HOUSING]

Housing Acts, Housing (rural workers) Acts, and small dwellings acquisition Acts—interest on loans. Circular 1339. leaflet. 9½". London: H.M.S.O. 1933. 1d. P.

(Changes in rates of interest.)

MINISTRY OF HEALTH [HOUSING]
Statutory rules and orders 1933, No. 425. Housing. England,
The Ministry of Health (rate of interest) amendment order 1933 etc.

leaflet. 98". London. H.M.S.O. 1933- td. P.

MINISTRY OF HEALTH: [HOUSING] Housing (financial provisions) Act, 1933. Circular 1334. pam. 9½". London: H.M.S.O. 1933. 2d. P. Ministry of Health: [Housing]

Rural housing. Circular 1335.
pam. 9½". London: H.M.S.O. 1933. id. P. NATIONAL HOUSING AND TOWN PLANNING COUNCIL

Memorandum upon the provisions of the Housing Act, 1930.

(Revised April 1933.) By John G. Martin. fo. pam. 13". London. 1933. R. NATIONAL HOUSING AND TOWN PLANNING COUNCIL

Memorandum upon the rural housing problem. (Revised April 1933.) By John G. Martin. And Rural Housing Supplement, a selection of photographs of houses reconditioned under the Housing (rural workers) Act, 1926. 2 vols. fo. pam. 13". London. 1933. R.

NATIONAL ASSOCIATION FOR THE PREVENTION OF TUBERCULOSIS Causal factors in tuberculosis. By F. C. S. Bradbury. [Overcrowding; insanitation; occupation of tenements, etc.]

9 $\frac{3}{4}$ ". x+125 pp. London. (1933.) [At the head of the review of Dr. Bradbury's paper in t JOURNAL the title was misprinted with CASUAL for CAUSAL. The price was also incorrectly given as 25s.]

Müller-Wulckow (Walter)

* Wohnbauten und Siedlungen. Q. 10½". 126 pp. Leipzig: Langewiesche. 1929. P. President's Conference on Home Building and Home OWNERSHIP

Final reports of committees. XI vols. and index. 9". Washington. 1932. \$1.15 (each). R.

Planning for residential committees.

Home finance and taxation.

TIL Slums, large-scale housing and decentralisation. Home ownership, income and types of dwellings.

House design, construction and equipment.

Negro housing.

VII. Farm and village housing.

VIII. Housing and the community-home repair and remodeling.

IX. Household management and kitchens

Homemaking, home furnishing and information services. XI. Housing objectives and programs.

General index.

HARBERS (GUIDO)

Das Kleinhaus seine Konstruktion und Einrichtung.

Q. 103". 87 pp. Munich: Callwey. 1932. 9s. 6d. P.

DETAILS

JOURDAIN (M.) * English interiors in smaller houses. From the Restoration to the Regency, 1660-1830. (A copy has now been added to the loan library.)

GOFFEY (A. E.)

Wrought ironwork in Leicestershire.

Thesis. 1932. Presented by the author.

Johnston (Philip Mainwaring)

A painted font in Great Maplestead church. [Reprint from the Transactions of the Essex Archæological Society. Vol. xx, Part 2.] pam. 8½°. [1932.] Presented by the author.

ALLIED ARTS

ECKARDT (ANDREAS)

A history of Korean Art. Translated by J. M. Kindersley. Q.111¹". xxiii+225 pp. and 180 pls. Leipzig; Hiersemann and London; Goldston. 1929. £1 11s. 6d. (remaindered). P.

ROES (A. Greek cometric art, its symbolism and its origin. 91". 128 pp. Oxford: University Press. 1933. 9s. P.

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BUILDING MATERIALS

CATHCART (A. N.) *Safeguarding ancient buildings No. 2. The death watch beetle, pam. 8½". London. [193.] (2) Presented by the author. UNITED STATES: DEPARTMENT OF COMMERCE, BUREAU OF STANDARDS

Research paper No. 422. Accelerated weathering tests of soldered and tinned sheet copper. By Peter R. Kosting. [Reprint from Bureau of Standards Journal of Research, vol. 8, March 1932.]
pam. 9". Bibliography. Washington: U.S. Government

Printing Office. 1931. 9d. P. INSTITUTION OF ENGINEERS AND SHIPBUILDERS OF HONGKONG *Building cements-ancient and modern. Paper by F. A. Redpam. 8½". Hongkong. 1933. R. (2) mond, February 1933.

MEMBERS

BRITISH STANDARDS INSTITUTION British standard specification for asbestos cement pressure pipes, 6, 486. pam. 8½". London. 1933. 2s. R.

BRITISH STANDARDS INSTITUTION British standard specification for steel conduit and fittings for

electrical wiring. (Revised April 1933.) No. 31. pam. $8\frac{1}{2}$ ". London. 1933. 2s. R.

SANITARY SCIENCE AND EQUIPMENT

ELECTRICAL CONTRACTORS ASSOCIATION

Electrical installation work good and bad.

94". 51 pp. London. (1929.) Presented by the Association.

HARDING (L. A.) and WILLARD (R. C.)

*Heating, ventilating and air conditioning. (A copy has now been added to the loan library.

*Heating and hot water supply.

(A copy of the new edition has now been added to the loan library). SANFORD (G. C.)

Central heating and hot-water supply for private houses. 7½". viii+172 pp. London: C. Lockwood. 1932. 8s. 6d. R.

PROOFING

FIRE OFFICES COMMITTEE *Rules . . . for the construction and fixing of fireproof doors, compartments and shutters. Section I. Doors other than rolling steel doors. Specification 9. Booth's patent "Stream-line" fireproof pam. 8". London. 1933. R. (2)

UNITED STATES: DEPARTMENT OF COMMERCE: BUREAU OF STANDARDS

Building and housing No. 14. Recommended minimum requirements for fire resistance in buildings.

pam. 9". Washington: U.S. Government Printing Office. 1931.

United States: Department of Agriculture Farmers' bulletin No. 1638. Rat proofing buildings and premises. pam. 9". Washington. 1930. 5d. P.

DICTIONARY CERMAK (ALOIS)

English-Czech Czech-English Dictionary. 5½". 727 pp. Trebie: T. Lorenz. 1928. 7s. 8d. P.

PERIODICALS

ARCHITECTURA Zeitschrift für geschichte und Aesthetik der Baukunst.

Berlin. Monthly publication.

LA TECHNIQUE SANITAIRE ET MUNICIPALE

Journal of the Association Général des Hygiénistes et Techniciens Municipaux. Monthly publication.

DESIGN FOR TO-DAY

(Incorporating design in industry.) Monthly publication. The above periodicals are now being received by the library.

Monthly publication. R. (Supplement). School construction.

SUBJECT INDEX TO PERIODICALS

The latest, 1931, edition of this work has been presented to the

INTIME CLUB

Croquis d'Architecture.

1866-1874. 4 vols.

TOPOGRAPHY

FORD (CHARLES BRADLEY)

* The landscape of England.

9". x+65 pp. and pls. London: Batsford. (1933.) 12s. 6d. R. & P. BRABANT (F. G.)

* Oxfordshire (the Little Guides series).

3rd ed. 6". xiv+282 pp. London: Methuen. 1919. 1s. P. WARD (W. H.) and BLOCK (K. S.)

A history of the manor and parish of Iver.

83". xvi+272 pp. and 16 pls. London: M. Secker. 1933. 10s. 6d. R.

TAYLOR (J.), NODIER (C.) ET CAILLEUX (A. DE) Voyages pittoresques et romantiques dans l'ancienne France.

Picardie Vols. I and III. fo. 211". Paris: Firmin Didot Frêres. 1835 and 1845. £2 10s. P.

[Volume II missing.]

TOWN AND COUNTRY PLANNING, AND GARDENING

Ministry of Health: [Town and Country Planning]

Memorandum T. & C.P. I. Town and country planning Act,
1932: regulations. pam. 9½". London: H.M.S.O. 1933. 1d. P.

MINISTRY OF HEALTH: [TOWN AND COUNTRY PLANNING]
[Memorandum] T. & C.P. 2. Town and country planning Act,

1932. General interim development order.
pam. 9½". London: H.M.S.O. 1933. 1d. P.

MINISTRY OF HEALTH: [Town AND COUNTRY PLANNING]
Memorandum T. & C.P. 3. Town and country planning Act, Memorandum T. & C.P. 3.

1932. General transitional order.

pam. 9½". London: H.M.S.O. 1933. id. P.

MINISTRY OF HEALTH: [TOWN AND COUNTRY PLANNING]

Statutory rules and orders, 1933. No. 236. Town and country planning, England and Wales. Interim development.
pam. 9½". London: H.M.S.O. 1933. 2d. P.
MINISTRY OF HEALTH: [TOWN AND COUNTRY PLANNING]

* Provisional rules and orders, 1933. Town and country planning, England and Wales.

Pam. 9½". London: H.M.S.O. 1933. 7d. P. (2)
MINISTRY OF HEALTH: [TOWN AND COUNTRY PLANNING]
Statutory rules and orders, 1933. No. 239. Town and country
planning, England and Wales. General transitional order.
pam. 9½". London: H.M.S.O. 1933. 2d. P.

CARLTON HOUSE TERRACE DEFENCE COMMITTEE

Chairman's report to the members.

leaflet. 83". London. 1933. R. Greater London Regional Planning Committee

* Second report, March 1933.

fo. 12". 112 pp. and 2 folding maps. London. 1933. 7s. 6d.

1 Presented by the Committee and 1 P.

FRANCE: COMITÉ DE SOCIÉTÉ NATIONALE D'HORTICULTURE DE FRANCE: COMITÉ DE L'ART DES JARDINS Jardins d'aujourd'hui.

fo. 13". Paris: Studios "vie à la campagne." 1932. R. HARBERS (GUIDO)

Der Wohngarten, seine Raum- und Bauelemente.

Q. 103". 210 pp. Munich: Callwey. 15s. 6d. P.

Photographs

FLITCROFT (HENRY)

Three photographs of portraits in oils of the Flitcroft family (Henry Flitcroft, his wife and son) have been presented to the library by Miss E. M. Porter, of Blomfield, Lake, I.O.W. (a descendant of the family).

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The Annual Elections of the Council-Standing Committees

THE SCRUTINEERS' REPORT

To the Chairman of the General Meeting, Monday, 12 June

The Scrutineers appointed to count the votes for the election of the Council and Standing Committees for the Session 1933-1934 beg to report as follows:—

1,367 envelopes were received—448 from Fellows, 566 from Associates and 353 from Licentiates.

The result of the election is as follows:-

COUNCIL 1933-1934

President.—Sir Giles Gilbert Scott (unopposed).

PAST PRESIDENTS.—Sir Banister Fletcher (unopposed); Sir Raymond Unwin (unopposed).

Vice-Presidents.—John Begg (Edinburgh) (nominated by the Allied Societies' Conference under Bye-law 28 (a)) (unopposed); William Henry Ansell (unopposed); Harry Stuart Goodhart-Rendel (unopposed); Maurice Everett Webb (unopposed).

HONORARY SECRETARY.—Sydney Decimus Kitson (unopposed).

Members of Council.—Fellows.—Elected: Professor Charles Herbert Reilly, 666 votes; Sydney Tatchell, 662; Professor Albert Edward Richardson, 603; Leo Sylvester Sullivan, 489; Joseph Emberton, 442; Ernest Chawner Bewlay, 427.—Not Elected: John Alan Slater, 402 votes; Major Thomas Cecil Howitt, 362; George Churchus Lawrence, 356; Herbert Duncan Searles-Wood, 347; Charles Holloway James, 321; Major Hubert Christian Corlette, 281; Edmund Bertram Kirby, 254; Lieut.-Col. George Val Myer, 218; Lieut.-Col. Percy Alfred Hopkins, 214; Arthur John Clifford Ewen, 202; George Dudley Harbron, 192; John Burgess Surman, 178; Henry Alderman Dickman, 165; Captain Samuel Douglas Meadows, 154; Alexander Burnett Brown, 143.—1,291 voting papers were received, of which 61 were invalid.

Associate Members of Council.—Elected: Edwin Maxwell Fry, 711 votes; John Douglas Scott, 689; Robert Norman Mackellar, 508.
— Nat Elected: Geoffrey Alan Jellicoc, 412 votes; George Leonard Elkington, 400; Percival Cherry Blow, 376; L. W. Thornton White, 249; Percival Mitchell Ware, 228. 1,291 voting papers were received, of which 16 were invalid.

LICENTIATE MEMBERS OF COUNCIL.—Elected: Percy John Waldram, 727 votes; Howard Leslie Baker, 381.—Not Elected: Louis Blanc, 368 votes; Stanley Arthur Heaps, 321; John Llewellin Smith, 275; Lionel Hubert Parr Patten, 214: William Hoe, 73.—1,291 voting papers were received, of which 21 were invalid.

REPRESENTATIVES OF ALLIED SOCIETIES IN THE UNITED KINGDOM OR THE IRISH FREE STATE.—Six Representatives from the Northern Province of England: James Robertson Adamson (Manchester Society of Architects); Leonard Barnish (Liverpool Architectural Society); Blakeley Rinder Gribbon (West Yorkshire Society of Architectural Society); Blakeley Rinder Gribbon (West Yorkshire Society of Architectural Society); John Lancashire (Sheffield, South Yorkshire and District Society of Architects and Surveyors); William Milburn, Junr. (Northern Architectural Association); Five Representatives from the Midland Province of England: William Thomas Benslyn (Birmingham Architectural Association); Major Charles Henry Calvert (Nottingham, Derby and Lincoln Architectural Society); Sidney Frank Harris (Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects). One representative to be nominated by the Council of the Leicester and Leicestershire Society of Architects. Six Representatives from the Southern Province of England: Hugo Ritchie Bird (Essex, Cambridge and Hertfordshire Society of Architects); Stanley Hinge Hamp (Berks, Bucks and Oxon Architectural Association); Lieut.-Col. Reginald Fowler Gutteridge (Hampshire and Isle of

Wight Architectural Association); Benjamin Priestley Shir a Devon and Cornwall Architectural Society). One representative to be nominated by the Council of the South Eastern Society of Architects. One representative to be nominated by the Council of the Wessex Society of Architects. Four Representatives of Allied Societies in Scotland, nominated by the Council of the Royal Incorporation of Architects in Scotland: James Alexander Arnott (Edmburgh); Andrew Graham Henderson (Glasgow); Arthur Hay Livingsten Mackinnon (Aberdeen); William Erskine Thomson (Dundeel, Om Representative of Allied Societies in Wales, nominated by the Council of the South Wales Institute of Architects: Lieut-Col. Edgar Hinten Fawckner (Newport). Two Representatives of Allied Societies in Ireland: Professor Rudolf Maximilian Butler (Royal Institute of the Architects of Ireland). One representative to be nominated by the Council of the Royal Society of Ulster Architects.

REPRESENTATIVES OF ALLIED SOCIETIES IN THE BRITISH DOMINIONS OVERSEAS.—To be nominated by the Council of each of the following: The Royal Architectural Institute of Canada: The Royal Australian Institute of Architects; The New Zealand Institute of Architects; The Institute of South African Architects; The Indian Institute of Architects.

Representative of the Architectural Association (London).

—Charles Lovett Gill (unopposed).

REPRESENTATIVE OF THE ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS.—Leonard Archibald Frederic Ireland (unopposed).

Chairman of the Board of Architectural Education.—William Henry Ansell (unopposed).

CHAIRMEN OF THE ART, LITERATURE, PRACTICE AND SCIENCE STANDING COMMITTEES.

CHAIRMAN OF THE ALLIED SOCIETIES' CONFERENCE.—John Begg (Edinburgh) (unopposed).

CHAIRMAN OF THE R.I.B.A. REGISTRATION COMMITTEE. HONORARY AUDITORS.—Ernest James Wedlock Hider (unopposed); James MacLaren Ross (unopposed).

James MacLaren Ross (unopposed).

The Scrutineers suggest that future voting papers for the election of the Council should be on white paper, the same size as the voting papers for the Standing Committees, and that the unopposed

Representatives of Allied Societies, etc., be printed elsewhere.

ART STANDING COMMITTEE, 1933-1934.—FELLOWS.—Elected:
Edward Brantwood Maufe, 750 votes: Henry Vaughan Lanchester,
699: M. H. Baillie Scott, 623; Joseph Emberton, 481.—Not
elected: Julian Randolph Leathart, 460 votes: Charles Lovett Gill,
455: Henry Martineau Fletcher, 411; Alderman Ewart Gladstone
Culpin, 329; John Burgess Surman, 249; John Clifford Procter, 247;
Walter Brand, 245: John Grey, 121. 1,278 voting papers were
received, of which 26 were invalid.

Associates.—Elected: Edwin Maxwell Frv, 799 votes: Raymond McGrath, 438.—Not Elected: Stephen Rowland Pierce, 403 votes: Donald Frank Martin-Smith, 218: Edward Brian O'Rorke, 165: Francis Ernest Green, 147: Cecil George William Eve, 143: Herbert John Harding, 128. 1,278 voting papers were received, of which 16 were invalid.

LICENTIATES.—Elected: Archiba'd Stuart Soutar, 595 votes.—Not Elected: Stanley Arthur Heaps, 381 votes; Major Reginald Hardy-Syms, 197. 1,278 voting papers were received, of which 31 were invested.

invalid.

LITERATURE STANDING COMMITTEE.—1933-1934.—FELLOWS—
Elected: Professor Leslie Patrick Abercrombie, 614 votes: Philip
Dalton Hepworth, 599; David Theodore Fyle, 489; Martin Shaw
Briggs, 460.——Not Elected: Lieut.—Col. H. P. I.. Cart de Lafontaine,
443 votes: Arthur Trystan Edwards, 391; Thomas Smith Tait, 346;
Thomas Arthur Darcy Braddell, 341; Charles Sydney Spooner, 337;

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346;

Lionel Godfrey Pearson, 276; The Hon. Humphrey Arthur Pakington, 240: Fred rick Charles Eden, 187; Charles Hilbert Strange, 147; Renjamin Priestley Shires, 104. 1,270 voting papers were received, of which 29 were invalid.

ASSOCIATES.—Elected: Grahame Burnell Tubbs, 460 votes; Miss Elisabeth Whitworth Scott, 405.—Not Elected: Geoffrey Alan Jellicoe, 300 votes: Arthur Gordon Shoosmith, 383; William Sydney Purchon, 380; John Newenham Summerson, 249; Frederick Richard Jelley, 150, 1,270 voting papers were received, of which 13 were invalid.

LICENTIATES.—Elected: Miss Jocelyn Frere Abram (unopposed); Norman Jewson (Cirencester), (unopposed).

PRACTICE STANDING COMMITTEE, 1933-1934.—FELLOWS.—Elected: Herbert Tudor Buckland, 598 votes; George Churchus Lawrence, 54; Herbert Arthur Welch, 512; William Thomas Curtis, 493.— Vot Elected: Edmund Bertram Kirby, 380 votes; Eric Wilfrid Boning Scott, 379: William Ernest Watson, 350; Alderman George Arthur Landown, 295; Percy Vivian Burnett, 255; John Leopold Denman, 24; Digby Lewis Solomon, 241; Albert Thomas Butler, 196; Geoffrey Cecil Wilson, 154. 1,282 voting papers were received, of which 46 were invalid.

Associates.—Elected: John Douglas Scott, 928 votes; John Batty, 477.—Not Elected: Edmund Blayney Clarke, 330 votes; Baxter Greig, 322: Oliver William Mafeking Law, 246. 1,282 voting papers

were received, of which 16 were invalid.

-Elected: Arthur Baldwin Hayward, 568 votes. Not Elected: Major Frederick William Rees, 353 votes; Captain Augustus Seymour Reeves, 242. 1,282 voting papers were received, of which 16 were invalid.

Of WHICH TO WEET INVALID.

Science Standing Committee, 1933-1934.—Fellows.—Elected:
Alan Edward Mundy, 986 votes; William Edward Vernon Crompton, 923; Reginald Minton Taylor, 821; Thomas Wallis, 650.-

Not Elected: Richard Bertram Ling, 645votes; Sidney Harold Loweth, 506. 1,254 voting papers were received, of which 8 were invalid. ASSOCIATES.—Elected: Arthur Edwin Cameron, 742 votes; Charles Charles Charles Charles

Stanley White, 717; Alister Gladstone MacDonald, 605.—Not Elected: Francis Milton Cashmore, 552 votes; Morris Lester Winslade, 405; Rupert Charles White-Cooper, 398. 1,254 voting papers were received, of which 10 were invalid.

LICENTIATES.—Elected: Oliver Percy Bernard, 712 votes.—Not Elected: George Nathaniel Kent, 461 votes. 1,254 voting papers were received, of which 28 were invalid.

E. J. W. HIDER, Chairman. ERNEST G. ALLEN. CHARLES H. FREEMAN. Scrutineers. ROBERT LOWRY. RONALD TOPHAM. GEOFFREY C. WILSON.

THE ANNUAL ELECTIONS

At the close of the General Meeting held on the 12th inst. an informal and private discussion took place. Referring to the recommendation contained in the Scrutineers' report, Major F. W. Rees suggested that at future elections for the Council and Standing Committees members should record positive and not negative votes. Lt.-Col. P. A. Hopkins supported the proposal and suggested that on future voting papers members should be asked to place a X against the names of the candidates for whom they wished to vote. The Chairman of the Scrutineers approved the suggestion and the President informed the meeting that the matter would be duly considered by the Council.

Obituary

FRANK WORTHINGTON SIMON [F.]

Mr. Frank Simon was elected to the fellowship of the Institute in 1902. He received his early training in Birmingham and later at the Ecole des Beaux Arts in Paris. He was Tite Prizeman of the R.I.B.A. in 1887. From the earlier nineties till about 1002 he practised in Edinburgh, having been latterly for some years in partnership with the late Sir Rowand Anderson Anderson, Simon and Crawford). On the dissolution of this partnership he won the competition for the Liverpool Cotton Exchange in association with Mr. Matear of Liverpool.

Latterly he had devoted himself principally to competition work, in which his chief success consisted of the competition for the new Parliament House at Winnipeg, Canada, the erection of

which building he himself saw through on the spot.

Mr Simon was a man of great personal charm. He had an unusually facile pencil and was no mean executant in water-colour painting. He had more than "a streak of genius" in design, and would assuredly have risen to the highest eminence in his profession had it not been for a certain wandering instinct that seemed to be deeply ingrained in his nature, and that kept him from allowing himself to take root in any one spot.

He died at Mentone on 19 May 1933, at the age of seventy.

PETER GASKELL [F.]

Mr. P. Gaskell, who died on 21 April 1933, started in personal practice as an architect in the year 1890 in partnership with the late William Freeman at Albert Chambers, 11 Carr Lane, Hull, retiring at the end of last year.

Among his important architectural works were the design and execution of ice and cold storage installations at Hull, Grimsby, Belfast, Swansea, Milford Haven, Harrogate, Scarborough and Middlesborough; many engineering works on St. Andrew's

Dock, Hull; and picture houses in Hull and elsewhere. He was for twenty years surveyor to Hornsea (East Yorks) Urban District Council, and was the engineer of the Withernsea Drainage Scheme. Since 1907 he had been a member of Hull City Council, and was for some years an Alderman. He was Lord Mayor of Hull in 1918.

His practice is being carried on at the same address by his two surviving partners, Mr. W. E. Hoppe and Mr. H. F. Wharf, under the title of Freeman, Son, and Gaskell.

ALBERT WARBURTON [A.]

Mr. A. Warburton, who died on 6 April, practised from 1893 till 1930 at 2 Bold Street Chambers, Warrington, retiring in 1930 owing to ill health from which he suffered all his life. He was elected an Associate of the Institute in 1892.

JAMES EDWIN WEBB [L.] Mr. J. E. Webb, Building Surveyor to the Nottingham Corporation, died on 9 March this year at the age of 65. He received his training in the office of Messrs. Woodsend, Ltd., in Nottingham, as apprentice, and after a short period in Croydon he returned as assistant to Messrs. Woodsend. In 1894 he was appointed Assistant Building Surveyor to the Nottingham Corporation under T. K. Gordon, on whose death in 1904 he was appointed Building Surveyor, a post which he retained until his death. His ability and his tact made him an invaluable servant to the Corporation which he served in his official capacity for 38 years.

WALTER SIMPSON [L.]

Mr. W. Simpson, who died recently, was for some years architect and surveyor to Messrs. Cadbury Bros., Ltd., of Bournville. He was responsible for the design of numerous buildings and played an important part in the rebuilding of the factory. He acted as Supervisor to the erection of the new welfare block at the factory, the architect of which is Mr. James Miller. In 1930 he visited British West Africa on behalf of the firm and there made a complete survey of their property at Accra and Coomassie.

17 June 1933

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Correspondence

NATIONAL HOUSING POLICY

National Housing and Town Planning Council, 41 Russell Square, London, W.C.1. 30 May 1933.

To the Editor, JOURNAL R.I.B.A.,-

SIR,—It is generally agreed that ample powers are provided under the Housing Act, 1930, for attacking different categories of slums and for rehousing families displaced from unhealthy areas and insanitary houses in new accommodation at low rents. The present scale of Exchequer assistance for this special work is fair and reasonable.

May I call attention, however, to the fact that there are now no State grants in aid of the provision of working-class dwellings other than in connection with schemes under the 1930 Act? There are admittedly tens of thousands of poor families living outside unhealthy areas (as defined by the Act) under seriously overcrowded conditions, and the absence of any definite programme to deal with this grave problem is to be greatly de-

plored.

The Minister of Health appears to have great faith in the proposals contained in the Housing Act of 1933, which received the Royal Assent on May 18. This Act repeals the Wheatley Housing Act of 1924, and provides that local authorities may assist builders to construct small houses to be let for persons of the working classes by undertaking to guarantee the repayment of advances made for this purpose by building societies. Unfortunately, the best bargain that the Minister could make with the building societies was for these advances to be made at the rate of 4 per cent. in the provinces and at 4½ per cent. in London and the South, the term of repayment being 30 years.

Let us see how this arrangement will operate, taking the all-in cost of a three-bedroom, non-parlour house, with land,

roads, and sewe s, at £350.

	£	S.	d.
Annual loan charges, viz., interest and sinking			
fund, for repayment of £350 in 30 years at 4 per			
cent	20	4	10
Repairs, management, insurance, and empties,			
per annum	6	0	0
Rates (based on average assessment of gross £18			
and rateable $f(11)$ at 13s. 4d. in the $f(11)$	7	6	8
	-		
Total	33	H	6

The gross rental of such a house will thus be approximately 13s. per week, a sum which is undoubtedly beyond the means

of the lower-paid wage-earners.

In his Housing Circular, 1,238, dated 12 January 1932, the Minister of Health urged local authorities to construct small houses to be let at inclusive rents of "10s. a week or less," and in his last annual report he stated that this Circular represented his considered housing policy. In these circumstances my Council cannot agree that the new scheme of guarantees is a satisfactory alternative to the Wheatley Act of 1924 which Sir Hilton Young has so ruthlessly scrapped.—I am, Sir, Your obedient servant,

JOHN G. MARTIN, Secretary, National Housing and Town Planning Council.

EASEMENTS OF LIGHT

39 Maddox Street, Regent Street, London, W.1. 17 May 1933.

To the Editor, JOURNAL R.I.B.A.,-

DEAR SIR,—It is, I think, very desirable that I should call attention to a statement of Mr. Justice Maugham, which appeared in the Solicitors' Journal of 11 March 1933, page 172. His lordship is reported to have said:

"I am hoping that one day, in cases of this kind, where reports are made by experts on each side, each side will hand the reports of its experts to the other side for consideration before the case comes on for hearing. Such a practice will effect a great saving of time, and I am hoping to see a reform of that kind before I leave the Bench."

These remarks of Mr. Justice Maugham are in agreement with his observations from time to time regarding the importance of daylight plans being agreed, in Right of Light cases, by both parties to an action, prior to any hearing in court. I well remember being requested by his lordship to leave the court for the purpose of endeavouring to agree daylight plans, prior to giving evidence, in the case of the Sheffield Masonic Hall Co., Ltd., v. the Sheffield Corporation, which was heard last year. In that case, the daylight plans prepared by me, largely by the photographic method, were so closely in agreement with those prepared, on behalf of the defendants, by the geometrical method, that counsel on both sides expressed the view that there was no substantial difference between them. Nevertheless, that is not always the case. In fact, there are still occasional cases in court, in which daylight plans have been prepared by one side only. It seems to me eminently desirable that every reasonable attempt should be made, beforehand, to save the time of the court, by endeavouring to arrive at some agreement as to the daylight plans which are to be produced in court. There are cases in which the basis adopted in the preparation of such plans is not identical, as, for example, when the effect is shown as regards all light enjoyed, and not as regards "ancient light" only. Even if there should be differences in the basis adopted, it is, nevertheless, most desirable that both parties should have an opportunity of knowing before the hearing, where and why differences occur, even if it should be necessary to leave the court to decide finally which of the sets is to be accepted. Obviously, considerable sums are often at stake in cases of this kind; and it is, to my mind, part of the duty of the advisers of every client, to see that every particle of evidence to be submitted has been tested in every practicable way, and that the differences between the evidence to be produced on each side are fully appreciated by all concerned, before any proceedings take place in court.-I am, yours faithfully,

JOHN SWARBRICK [F.].

MOISTURE IN FLUES FROM GAS FIRED BOILERS

Bessemer Building, Pittsburgh, Pa. 8 May 1933.

To the Editor, JOURNAL R.I.B.A.,-

DEAR SIR,—I have followed for some time your "Notes from the Information Bureau of the Building Research Station," and was tempted some time ago to give you our answer one of your problems. In Bulletin 26 November 1932, Item 127, Moisture in Flues from Gas Fired Boilers. Pittsburgh

is in the natural gas region of Pennsylvania and gas-fired boilers are quite common in heating plants. Your trouble with damp flues and the consequent disintegration of plaster by moisture is quite common and I have seen your solution tried a number of times with little or no success. After several heating seasons the fuming strips dry rot, if they are wood, and if metal is used the lath rots out.

Where the flue is vertical we can cure the trouble at very

little expense by the following procedure.

A tinner or sheet metal worker will construct a galvanised iron duct of about 12 or 14 gauge material with as large a diameter as your flue will take, and he inserts this pipe from the roof in short lengths, which he fastens together as he lets it down the flue. When the lining has reached the base of your stack, connect your gas flue to same and your damp walls will dry up and not occur in the future.

Where flues are not vertical this is an expensive operation

except for new work.

I have seen flue walls dry in a room except behind pictures which were hung on the walls. This is explained by the fact that the moisture is carried off by the air in the room, and the picture stopped the circulation of air and moisture formed.

Give the above method a try, and see if it is not more economical and more effective than any surface treatment. -Very truly yours, EDWARD STOTZ, JR.

EAST KNOYLE PARISH CHURCH

The Rectory, East Knoyle, Salisbury. 6 June 1933.

To the Editor, JOURNAL R.I.B.A.,-

DEAR SIR,-It occurs to me that as there must be among the members of the Royal Institute of British Architects many who are interested in and admirers of the work of Sir Christopher Wren, you may not regard it amiss if I write and ask whether it is possible for the Institute to come to the help of the Parish in which Sir Christopher was born, and of which his father was Rector, in a difficult task which confronts us. Our church roof is in serious need of repair, at an estimated cost of £240, as also our church bells, a peal of six, at an estimated cost of £202, so that we have to raise approximately £450.

This is a large sum to look for in such a community as this, which is almost entirely agricultural, and while we are making efforts to help ourselves, I am naturally appealing to any source where sym-pathetic consideration might for any reason be given to such an appeal.

We should indeed be grateful for any help you may be able to give through the Institute or its members in memory of a great Englishman, and an ornament of your profession, of whom we are mutually proud. —I am, Dear Sir, Yours very truly,

ERNEST CROSS. Rector.

P.S.-Tradition says that Sir Christopher first acquired a taste for architecture when, as a boy, he climbed about on the said roof while it was under repair.

Architects' Unemployment Relief Fund

As the accounts of the Unemployment Relief Fund for 1932 have now been closed, the Committee have decided that a list should be published of the amounts subscribed during the year to bring the bscription list in line with the list of donations where the name of the donor and the amount contributed are given at the same time. The names only of subscribers have been given when they joined the scheme, but as most subscriptions are paid monthly it has not been found practicable to publish the amounts as they are received. It is proposed, however, in future to issue a subscription list every quarter.

The total amounts subscribed last year are given below:

Messrs. Adams, Holden and Pears	son £155 9 4
Mr. L. M. Angus Mr. W. Holden Mr. T. Haiselden Mr. F. H. Smith Mr. K. Bilsborrow	Mr. D. M. Pate Mr. C. W. Hutton Mr. E. B. Thompson Mr. I. Schultz
Mr. W. H. Allen	£0 12 8
The Architectural Association Mr. John Grey Mr. Vernon O. Rees Mr. Louis de Soissons Mr. H. Braddock Mr. J. M. Clarke Mr. Claude Miller Mr. A. S. Knott Mr. T. Snailum Mr. J. Macgregor Mr. G. B. Jellicoe Mr. F. R. Yerbury	Mr. E. R. Jarrett Mr. H. G. Atkin-Berry Mr. G. W. Morgan Mr. S. Rowland Pierce Mr. D. H. Beaty-Pownall Mr. J. M. Holme Mr. T. Ritchie Mr. C. S. White Mr. P. Cutbush Mr. H. J. W. Alexander Mr. Hope Bagenal
Messrs, Ashley and Newman Mr. G. Vey Mr. H. H. Bull Mr. W. Howard	£52 os. 10d. Mr. R. J. Truelove Mr. A. J. Tolhurst Mr. W. J. Smith
Messrs, Robert Atkinson Mr. H. E. Herman	Mr. R. Pitt £8 18 8

Messrs. Baily and Eberlin Mr. Walter Timms	£9	10)	0
Sir Herbert Baker, A.R.A. Mr. F. Sharp Mr. L. J. Bathurst Mr. T. Harley Mr. V. Helbing Mr. C. D. St. Leger Mr. W. Percik Mr. H. E. Wilson Mr. D. E. Fleming	Mr. R. E. Thallon Mr. H. S. Stephens Mr. H. J. Manchip Mr. R. H. Maddock Mr. A. C. S. Auld Mr. A. Slade Miss M. G. Pearson	15		0
Mr. E. W. Banfield	£4	4	1	0
Mr. G. H. Biss	£o	1:	2	8
Mr. C. F. Boniface	£4		1	0
Mr. E. H. Boyle	£4	2	1	0
Mr. F. H. Brazier	£ı	15	3	3
British and Dominions Film Corpo Mr. Lawrence P. Williams Mr. G. E. C. Stegman	oration, Ltd. £6 Mr. F. Pusey Mr. Harold Elvin	I	3	0
Mr. E. H. Bucknole	£2	(9	2
Sir John Burnet, Tait and Lorne Mr. A. D. Bryce Mr. L. G. Farquhar Mr. J. H. Wallace Mr. S. C. Kirby Mr. W. Ferguson	Mr. F. E. B. MacManus Mr. O. A. Bayne Mr. L. Liscombe Mr. F. Stengelhofen	-		8
Mr. A. J. Butcher Mr. J. V. Hibbert	Mr. A. N. Aylwin	I	I	4
Mr. R. W. Cable	£8	,	8	0
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Mr. S. Chesney		£) I	0	1	Mr. B. W. L. Gellamany	Mr. Eric K. Day			
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	Mr. Collard Mr. Turner	£81	19	6		rs. Evans, Clark & Woollatt Mr. F. H. Harrington	Mr. A. Thorpe No	/16 ewsum	10	0
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Mr. Fahy Mr. Pirie Mr. Allingham	Mr. Rushbrook Miss Fowler Miss Valette					Henry M. Fletcher Mr. H. R. A. Newbold			4	
Mr. Patterson Mr. Owen Mr. Thomas	Miss Collard Miss Budd Miss Simmons				7	V. F. Foster Mr. R. E. Adams Mr. L. Senyard	Mr. A. Mutimer Mr. N. Callaghan	£26	18	7
Mr. Golding				-		E. Maxwell Fry		LI	0	0
Messrs. Collcutt and Hamp	* **** * * *	£24	14	6	Mr. F	I. St. C. Garrood		26	0	0
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Mr. P. G. Bridge	Mr. H. E. Pettit				Mr. H	I. Percy Gordon		£6	6	0
Mr. Alfred Cox Croydon Borough Engineers' Offi	ina.	£50				s. Gotch & Sanders		£10	8	1
Mr. E. E. Hodder Mr. D. Weightman	Mr. G. Wolfe Mr. W. Harrison	4.0	8	0		Ir. C. R. Crumpton . Tilsey Green		£2	0	0
Mr. R. Pitt					Messrs	s. Mowbray, Green & Hollie	er	£11	15	0
Mr. H. W. Currey		£3				Gunton & Gunton		£32	18	8
Mr. F. J. Daniel		£2				Ir. H. Gilford Ir. W. H. Baines	Mr. A. C. Wright Mr. F. C. Haskins			- 1
Mr. E. Guy Dawber Mr. A. R. Fox Mr. O. F. Savage	Mr. R. J. Bomer Mr. E. H. H. Willi	£6	19	4	Mr. E	dward E. Hall		4	2	4
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Mr. W. Dingwall		£3	14	3		Ir. T. J. Baker Ir. T. L. Bright	Mr. F. A. James Mr. F. Kempster			- 1
Mr. R. Fielding Dodd's Staff		L4	13	6		Ir. J. D. Colchester	Mr. F. L. Preston Mr. C. L. Scholefie	Ld		- 1
Mr. John Dower		£+	4	0		Ir. D. G. Collie Ir. S. E. D. Cusdin	Mr. R. S. T. Sewell			- 1
Mr. E. Ford Duncanson		£6	10	O		r. J. W. Dawson	Mr. G. Westrup			- 1
Architect's Branch of the Board of Mr. G. E. Kendall	f Education Mr. R. W. Atkin	£18	14	0		r. G. I. C. Highet				- 1
Mr. F. Jackman	Mr. F. B. R. Brown	1				S. Hammond		L.+		
Mr. W. R. Macdonald	Mr. T. Burrington	-				H. Harrison		£1		
Messrs. F. J. Eedle and Meyers Mr. A. A. Reeve	Mr. F. J. Maunder	£13	O	O	Mr. Be	n Haylor		\mathcal{L}^6		
Mr. J. R. Gosling	Miss Gladys Brew				Mr. Ar	thur B. Hayward		£4	0.	0
Mr. G. H. Brown Messrs. Elcock and Sutcliffe Mr. E. H. Allsford Mr. E. V. N. Strother Mr. J. L. Harvey	Mr. A. S. Gasson Mr. J. M. Metcalfe Mr. E. N. Criffiths	£67	10	0	Mi Mi Mi	ects' Department of the Min r. C. H. Baker r. H. A. Chapman r. W. H. Collin r. F. Collin Brown	istry of Health Mr. S. Pointon Tayl Mr. A. Scott Mr. H. Stewart Mr. R. W. Thorp	\mathcal{L}^{24} lor	9	6
Mr. R. M. Smith Mr. A. M. G. Rees	Mr. J. Foster				Messrs.	Heazell & Sons		£6	5	2
Messrs. Elgood and Hastie		£12 1	12	0	Mr. H.	C. Hughes		£3 1	5 8	3
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Messrs, G. Elkington & Son Mr. George Elkington Mr. G. Leonard Elkington	Mr. F. W. Andrews Mr. E. W. Palmer	£29	5	0	Mr	Jarvis & Richards , T. E. Brown	Mr. S. H. Ball	£15 16		1
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Notes

PRESIDENT'S ENGAGEMENTS

The President attended the Scottish Convention on 2 and 3

VICE-PRESIDENT'S ENGAGEMENTS

Mr. Sydney Tatchell, Vice-President, will be attending the dinner of the Law Society on 29 June, in place of the President. Mr. Sydney Tatchell, Vice-President, attended the dinner

of the National Institute of Industrial Psychology on 29 May. MR. F. DE J. CLERE [F]

Mr. F. de J. Clere, who was appointed R.I.B.A. Hon. Secretary for New Zealand in the year 1894, has now held the appointment for no less than 39 years. In point of election one of the oldest Fellows of the Institute, Mr. Clere was elected an Associate in 1882 and a Fellow in 1886, and has thus passed his half-century as an active member of the R.I.B.A.

LEGAL ADVICE FOR MEMBERS OF THE R.I.B.A.

The Practice Standing Committee, with the approval and authority of the Council, have made arrangements with an experienced solicitor, whereby members of the R.I.B.A. can obtain legal advice for a very moderate fee on matters which arise in their practice from time to

The following arrangements have been made: -

A member desiring advice as to his legal position should in the first instance communicate his enquiry to the Hon. Secretary of the Practice Standing Committee, together with the relative documents. Should the matter raise a question of general interest to the profession, the Committee would obtain the opinion and forward it to the member. In other cases the member would be put in communication with the solicitor, who would advise him direct.

In matters of general interest the solicitor's fee would be borne equally by the R.I.B.A. and the member concerned, and in other cases the fee would be borne wholly by the member. The fee would in either case be limited to a fixed amount. The advice would normally be confined to an opinion on the documents, but in cases where an interview between the member and the solicitor would be desirable, this would be arranged without

Particulars as to the fee chargeable may be obtained on application to the Secretary, R.I.B.A.

ASSISTANT SURVEYORS IN THE ADMIRALTY AND AIR MINISTRY

A Competition is to be held to fill vacancies for Assistant Surveyors in the Admiralty and Air Ministry, the written examination for which begins on 22 August 1933, in London.

Applications must be received by the Secretary, Civil Service Commission, on or before 29 June 1933. Copies of the Competition Regulations and Application Forms can be obtained from the Civil Service Commission, Burlington Gardens, London, W.1.

ARCHITECTS' GOLFING SOCIETY

A successful meeting was held on Wednesday, 24 May, at the Addington Golf Club, Croydon.

The President (Sir Giles Scott) and twenty other members attended.

The weather conditions were ideal, and some very low scores were returned.

The Captain's Cup returns were: H. St. J. Harrison . . W. H. Ansell . . H. Tanner .. Sir G. G. Scott.

In the afternoon a fourball foursome against bogey was won by Sir Giles Scott and H. St. J. Harrison with the excellent return of 8 up. Membership of the Golfing Society is open to all whose names are in the *Kalendar*. Will anyone interested please communicate with the Hon. Secretary, R. B. Selby [4.], 46 New Bond Street, London,

NOTES FROM THE MINUTES OF THE COUNCIL,

8 May 1933.

MR. ARTHUR J. DAVIS, A.R.A.

The cordial congratulations of the Council were conveyed to Mr. Arthur J. Davis $[\tilde{F}.]$, on his recent election as an Associate of the Royal Academy.

PUBLIC LECTURES ON ARCHITECTURE

The outstanding success of the recent series of public lectures on architecture was reported to the Council and hearty votes of thanks were passed in favour of the lecturers.

VALUATION OF R.I.B.A. PORTRAITS, BOOKS, DRAWINGS, ETC.

Hearty votes of thanks were passed in favour of Mr. C. F. Bell [Hon. A.] and Mr. Harry Batsford [Hon. A.] for their services in valuing the R.I.B.A. portraits, books, etc.

THE OLD ASHMOLEAN MUSEUM

Mr. Sydney Kitson, Hon. Secretary R.I.B.A., was appointed to represent the Institute at the 250th anniversary of the opening of the Old Ashmolean Museum.

THE SCOTTISH ARCHITECTURE MEDAL

Mr. T. R. Milburn [F.] was appointed as the R.I.B.A. representative on the Jury for the award of the Scottish Architecture Medal 1927-1932.

NINETEENTH ANNUAL CONFERENCE OF THE NATIONAL ASSOCIATION FOR THE PREVENTION OF TUBERCULOSIS, CARDIFF, 13 TO 15 JULY 1933

Mr. W. A. Pite [F.] was appointed as the R.I.B.A. delegate at the above Conference.

FORTY-FOURTH CONGRESS AND EXHIBITION AT BLACKPOOL OF THE ROYAL SANITARY INSTITUTE

Mr. F. M. Wilding [L.] was appointed as the R.I.B.A. delegate at the above Congress.

BOARD OF ARCHITECTURAL EDUCATION OF THE ROYAL VICTORIAN INSTITUTE OF ARCHITECTS

Mr. Leighton F. Irwin [F.] was appointed as the R.I.B.A. representative on the Board of Architectural Education of the Royal Victorian Institute of Architects in the place of the late Mr. Rodney H. Alsop.

STANDARDISATION OF WATER CLOSETS AND LAVATORY BASINS

Mr. F. R. Taylor [L.] was appointed to represent the R.I.B.A. at a conference called by the British Standards Institution to consider the question of the standardisation of water closets and lavatory basins.

THE SOCIAL COMMITTEE

Miss G. M. Leverkus [F.] was appointed as an additional member to serve on the Social Committee as a representative of the Women Members Committee.

DEVELOPMENT OF THE R.I.B.A. JOURNAL

The Council approved proposals submitted by the Finance and House Committee for the development and improvement of the R.I.B.A. JOURNAL.

ADVERTISING AND PUBLICITY

The Council approved proposals submitted by the Practice Standing Committee for dealing with the above matter.

LEGAL ADVICE FOR MEMBERS OF THE R.I.B.A.

The Council approved a scheme submitted by the Practice Standing Committee for the provision of legal advice at moderate fees for members in regard to matters arising in their practice.

THE CODE OF PROFESSIONAL PRACTICE

The Council approved proposals submitted by the Practice Standing Committee for the amendment of the preamble to the Code of Professional Practice.

THE STIRLING CHAPTER OF THE ROYAL INCORPORATION OF ARCHITECTS IN SCOTLAND

The newly formed Stirling Chapter of the Royal Incorporation of Architects in Scotland was formally admitted as an Allied Society.

Provision of Plans for Small Houses: Bucks Society $\ensuremath{\mathsf{GF}}$ $\mathsf{Architects}$

The scheme for the provision of plans for small houses abmitted by the Bucks Society of Architects was formally approved.

Nomination of Honorary Auditors for 1933-1951

Mr. E. J. W. Hider [F] and Mr. J. Maclaren Ross [A] were nominated as Honorary Auditors for the Session 1933-1934.

THE FELLOWSHIP

The Council, by a unanimous vote, elected the following architect to the Fellowship under the powers defined in the Supplemental Charter of 1925:—

Mr. Vincent Kelly, B.Arch., M.R.I.A.I. (Dublin).

MEMBERSHIP

The following Men	abers v	vere ele	cted:-		
As Hon. Co	rrespoi	nding A	1ember	 	1
As Fellows				 	II
As Associate	S			 	17
As Licentiat	es			 	11

Reinstatements — The following ex-members were reinstated:—
As Licentiates: Captain Charles Thomas Morris Evans,
R.E.

Sydney Rhys Crocker.

George Holmes.

Transfer to the Retired Members Class.—The following members were transferred to the Retired Members' Class:—

As Retired Fellows
Edwin Thomas Johns,
Samuel Hurst Seagar.
As Retired Associate
John Reginald Best.

Resignations.—The following resignations were accepted with regret:—

Frank Stephen Reynolds [F.]. Milton Botting [A.]. Doris Silcock $(n\acute{e}e$ Musker) [A.]. John Rowland Fairbairn [L.]. John Frank Johnson Goodacre [L.]. Edward A. B. Hay [L.].

Allied Societies

ROYAL INSTITUTE OF THE ARCHITECTS OF IRELAND

The annual report of the Council of the R.I.A.I., which is contained in its Journal for 1933, refers to all branches of the Institute's work during the year. The total membership of the Institute is now 150, in addition to which there are 30 Probationers and 17 Students. The activities of the various committees are reported fully in the Council's Report, as is also the work of the Institute with regard to certain problems concerning the profession generally, such as the salaries of official architects, proposed tariffs on building materials, National schools, housing, work for hospitals.

The Journal also contains a full account of the annual general meeting and annual dinner of the Institute, which were held in December last, and the balance sheet for the year is published in full, showing the satisfactory financial position of the Institute.

MANCHESTER SOCIETY OF ARCHITECTS

Annual Report 1932-1933

The Annual Report of the Council of the Manchester Society records all facts concerning the meetings, attendances, and membership of the Society during the year. It includes a reference to the outstanding success of the R.I.B.A. Conference held last June in Manchester, and includes also a tribute to the late Mr. J. Theo Halliday, a past-President of the Society, and to Mr. R. McBeath and Mr. Frank Mee, who died during the year. With regard to unemployment, it is stated that three members have been given work

as a result of the response to the appeal in aid of the Employment

Donations have been sent, both to the Architects' Benevolent Society and the Artists' General Benevolent Institution, and the Council expresses its appreciation of the generous assistance given by both bodies in cases of necessity within the area of the Society. The Council further urges members to support the funds of both Societies as generously as possible.

The Report calls attention to the thriving condition of the Students' Association which meets in the rooms of the Society. The Council wish it to be known that non-University Students are eligible for election as members of the Students' Association.

The Report further states that the Council has supported a scheme

The Report further states that the Council has supported a scheme for co-operation with house builders, in the hope that an improvement might be made in the design of suburban houses. With this object, a conference with representatives of the Builders' Association and the House Builders' Association was held in the Society's Rooms on 24 February 1933. As a result, a committee was appointed to arrange for a competition for the purpose of obtaining panel designs suitable for use by speculative builders and others. Since the Conference, the City Architect has published a pamphlet, which the Council trust may have the effect of producing economies and securing the erection of more suitable domestic buildings by private enterprise.

erection of more suitable domestic buildings by private enterprise.

The representatives of the Society on the Civic Advisory Committee, of which Dr. Percy Worthington is chairman, continue to do a considerable amount of valuable, if unostentatious work for the amenities of the City.

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SOUTH-EASTERN SOCIETY OF ARCHITECTS CROYDON CHAPTER

The Croydon Chapter of the South-Eastern Society of Architects held their annual meeting at the Public Halls, George Street, Croydon, on Tuesday, 23 May, with Mr. Hugh Macintosh $[F_{\cdot}]$ in the Chair. The Hon, Secretary, Major F. W. Rees, presented his Report, and gave a highly satisfactory account of the activities and membership of the Society during the year. The Hon. Treasurer, Mr. C. E. Hanscomb, also presented his Report.

The following new officers were elected:—

The following new officers were elected:—
Chairman, Major F. W. Rees [L.].
Hon. Treasurer, Mr. C. E. Hanscomb [F.].
Hon. Secretary, Mr. F. Sutton-Smith [L.].
Hon. Auditor, Mr. Briant Poulter [F.].
and the Committee were also elected.

Following the Business Meeting, a Public Meeting was held, at which His Worship, the Mayor of Croydon, Mr. Alderman William Peet, J.P., F.C.A., first welcomed the members and guests, and gave

The Mayor then presented a gift of books to Mr. J. T. Castle [4.], who had acted as voluntary Instructor at the Design Club during the last two years, after which the three prizes awarded by the Society to the school children who had written the best essay in connection with Mr. E. R. Jarrett's Lectures on "How London Grew" were presented. Prizes were also presented to the Architectural Students

for work done in connection with the Design Club. Mr. R. Goulburn Lovell [A.], the Hon. General Secretary of the South-Eastern Society of Architects, moved a vote of thanks to His

Worship the Mayor, which was unanimously carried. Mr. Hugh Macintosh then introduced Mr. T. Graham Crump [L], who gave a very interesting lecture on the "Town and Country Planning Act," the lecture being illustrated by lantern slides, after which questions were invited and answered.

Mr. R. Goulburn Lovell proposed a vote of thanks to Mr. R. Graham Crump, which was seconded by Mr. E. Hodder [L.], and was carried unanimously.

ABERDEEN SOCIETY OF ARCHITECTS

ANNUAL REPORT BY THE COUNCIL

The Report of the Council includes references to the opening of a new Reading Room for the use of members; the Society's visit to

Hilton Schools; the lectures given to the Society during the year; and the transactions between the Society and the R.I.B.A. and the R.I.A.S. With regard to the membership of the Society, a total membership of 79 was reported, an increase of 12 over the number at the close of last year. The death of Mr. W. T. Devlin was regretfully recorded. The accounts of the Society, audited by Messrs. Williamson and Dunn, were submitted, showing a credit balance of £87.78. 10d. for the year.

SCOTTISH ARCHITECTURAL PRIZES

The Jury of Assessors, consisting of Messrs. James A. Edinburgh) A. G. Henderson (Glasgow), John Stewart (Glasgow), A. F. Balfour Paul (Edinburgh), and A. H. L. Mackinnon (Aberdeen), have issued their award of the Prizes annually given by the Royal Incorporation of Architects in Scotland. There were 81 competitors for Session 1932/33, the Prize Winners being as follows:

(a) David G. MacConville, Glasgow School of Art, who gained the Rowand Anderson Studentship (Silver Medal and £100) for the best design for a "Pavilion or Palace of Arts for the British Empire at a

(c) P. H. D. Ronaldson, Edinburgh College of Art, who gained

"Honourable Mention."

(d) Philip McManus, Edinburgh College of Art, who gained the Rutland Prize (Certificate and £50) for the best selection of Practical Working Drawings for a "Riverside Restaurant with a Sun Roof."

Wm. G. Dey, Edinburgh College of Art, who gained "Honourable Mention."

(f) William Archibald Jack, Glasgow School of Art, who gained the Incorporation Prize (£15) available to third year Students producing the best design for an "Open-air Theatre in the Garden of a Great Musician.

(g) T. Warnett Kennedy, Glasgow School of Art, who gained

(g) T. Warnett Kennedy, Glasgow School of Art, who received second Prize (£5).

(h) Miss Mary Drysdale, Edinburgh College of Art, who received "Honourable Mention" with special Prize of £2.

(i) N. R. J. Johnston, Glasgow School of Art, who gained First Prize (£15) in "Quarterly" Essay Competition.

(j) The Maintenance Scholarship. £50 per annum for 2/3 years was accepted to an Edinburgh Student.

awarded to an Edinburgh Student.

SCHOOL NOTES

EXHIBITION OF WORK

THE CENTRAL SCHOOL OF ARTS AND CRAFTS

This is a fascinating exhibition to visit because it includes so many examples of accomplished craftsmanship. If one tires of looking at drawings or designs, there is always a silver cup or a piece of furniture at hand to which to turn for change of

The drawings which make up the architectural exhibit are, owever, far from generously treated as regards the wall space allotted to them. Although there are only twenty-five or thirty drawings in all, some of them are "skied," so that they are difficult to see and to read.

Last year's exhibits took the form of team work on a project for a seaside town. This year the subjects are of the varied type found in the later years of most architectural schools. There are no drawings showing the way by which the student has come. All are design subjects and they show the present position of the student in his architectural pilgrimage. His final objective may perhaps be deduced from them.

The Central School architectural department is an evening school. Its students are for the most part in offices during the day and this fact is obviously taken into account in the curriculum. The school therefore appears to be of the nature of an "atelier" which seeks to give a definite point of view as regards design and to provide the opportunity for the expression of this point of view in the working out of design subjects.

In earlier years Mr. Halsev Ricardo was the head of the architectural school and the inspiration of the work done there. Although the writer was never in Mr. Ricardo's classes, he was closely associated with him in other ways and had many discussions with him on theories of architectural design. Mr. Ricardo combined an individuality which leaned strongly towards what is called to-day "functional expression," with what amounted almost to a reverence for certain historical architectural form. His own work and his teaching showed clearly his belief in that building craftsmanship which understands the qualities of materials, old or new, and the sane way of using those materials. It is interesting to note that the Ricardo influence has not entirely departed. Mr. S. B. Caulfield and Mr. Basil Oliver, himself a Past-Master of the Art Workers' Guild, and their colleagues, are evidently influenced by similar ideals which are reflected in the work of the students.

The subjects comprise an inn, a hostel for hikers set in a hilly country, a Scouts headquarters, a small town hall and an aerodrome.

The latter is the most considerable subject and the designs of C. K. Slade and H. S. Pitt for this are perhaps the best in the

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Exhibition. The layout of both is good, the detail planning carefully thought out, and the elevational treatment, particularly of Mr. Slade's design, soundly modern without freakishness. Mr. Porteus's inn is a very pleasant affair with a real unity of scale and material, and Miss Pertwee's small house is a delightful conception of the possibilities, even dignified possibilities, of a perfectly well-known and much-used plan. Many have used this plan, but few have made so simple, well balanced, and interesting a building of it.

The hotels, so far as one could see them, were exercises in the use of local idiom and material in somewhat difficult

The Scouts headquarters by D. A. Bowen and R. C. Dav were pleasantly barnlike, though had the drawings been carried further-say, to the half-inch detail stage-it is possible that there would have been certain alterations in the sizes and dispositions of the roof timbers.

Character in the work of architectural schools is good if it comes not by definite endeavour to attain it but by reason of sound underlying principles. This small exhibition shows that such principles are being inculcated here.

ARCHITECTURAL ASSOCIATION
It is now confirmed that Mr. E. A. A. Rowse, A.R.I.B.A.,
A.M.I.Struct.E., an old A.A. student under Mr. Robert Atkinson, has been appointed as the new Assistant Director. Mr. Rowse commences his duties next session, after he has completed the present session at Edinburgh College of Art where he has been Senior Assis-tant in Design on the staff of the Architectural School.

An interesting exhibition is being held in the Members' Pyhibition Room from 26 June to 15 July of "Recent Work of the stypt Exploration Society," and a lecture by Mr. J. D. S. Pendlebury, M.A., (Field Director of the Egypt Exploration Society's Explication at Tell-el-Amarna) will be given on Monday, 10 July.

The Annual Excursion this year will be to Italy, and the four will include visits to Milan (at the time of the Exhibition of Modern Decorative Arts and Architecture), Florence and Rome. Italy is a popular choice, as keen interest is being shown in developments in that country, especially in Rome.

The Fourth Year had a most interesting visit to Beckenham Town Hall (architects: Messrs, Lanchester and Lodge, FF.R.I.B.A.), and Messrs. Holloway Bros. again arranged for the First Year to visit their joinery works at Earlsfield.

The Annual Exhibition of Students' Work will be held from 15 to 29 July (10 a.m. to 7 p.m.), and it is hoped it will be freely attended by architects and students from other centres.

The Annual Prize-giving Day will be on Friday, 14 July.

THE WELSH SCHOOL

The students of the Welsh School of Architecture played a prominent part in the annual sports of the Technical College, Cardiff, held on Thursday, 1 June 1933, taking seven first out of 11 events.

The two departmental events, the tug-of-war, and the one mile relay race, were both won by the Welsh School of Architecture, while important events were won by D. K. G. Cumming and D. J. Armstrong, both students in the Architecture School, D. K. G. Cumming winning the 120 yards hurdles, 880 yards flat, and one mile flat, while D. J. Armstrong won both the long jump and the high

Membership Lists

APPLICATIONS FOR MEMBERSHIP ELECTION: 3 JULY 1933

In accordance with the terms of Bye-laws 10 and 11 an election of candidates for membership will take place at the Council Meeting to be held on Monday, 3 July 1933. The names and addresses of the candidates, with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Bye-laws, are herewith published for the information of members. Notice of any objection or other communication respecting them must be sent to the Secretary R.I.B.A. not later than Tuesday, 27 June 1933

AS HON. CORRESPONDING MEMBER (1)

Poelzig: Professor Hans, Dr.ing.h.c., Hardenbergstr. 33, Charlottenburg 2, Berlin; Tannenbergallee 28, Charlottenburg, tenburg 2, Berlin; Tannenber Berlin. Proposed by the Council.

AS FELLOWS (12)

HOLLIDAY: ALBERT CLIFFORD, B.Arch.Liverpool, A.M.T.P.I., [A. 1922]. 25 Julians Way, Jerusalem. Proposed by W. J. Price, Major Geo. T. Caryer and B. Chaikin.

LAVENDER: EDWARD PRICE [A. 1922], Council Offices, Letchworth, Herts; 26 Souberie Avenue, Letchworth. Proposed by Cecil H. Hignett, Sir Banister Fletcher and Barry Parker. Ross: Walter Gray [A, 1899], "Newlands," Higher Drive, Banstead,

Surrey. Proposed by John H. Markham, C. D. Hawley and H. D. Searles-Wood.

Sawday: Tom Trevor [A. 1904], 56 London Road, Leicester; Evington House, Old Evington, near Leicester. Proposed by George Nott, Albert Herbert and Arthur H. Hind.

WATSON: PAXTON HOOD [A. 1889], 38 Bell Street, Reigate; Barn Wood, Worth, Sussex. Proposed by Alfred Cox, Sir Giles Gilbert Scott and Arthur J. Davis.

Wilshere: Reginald Sharman, M.C., P.A.S.I. [A. 1915]. tect to the Belfast Education Authority, Victoria Street, Belfast; Augh-an-Oir, Newtownards, Co. Down. Proposed by R. H. Gibson, John Seeds and Kendrick Edwards. and the following Licentiates who have passed the qualifying Examination:

HINDERER: CAPTAIN CLAUDE MICHAEL BOYS, M.C., P.O. Box 80, Nairobi; P.O. Box 201, Mombasa, Kenya Colony. Proposed by Harold E. Henderson, C. Rand Overy and R. Stanley Cobb. MASEY: FREDERICK WILLIAM, National Mutual Buildings, Maitland Street, Bloemfontein, Orange Free State. Proposed by Robert Howden, Ernest M. Powers and F. K. Kendall.

MEDLEY: CLIFFORD, The Yorkshire Penny Bank, Ltd., Infirmary

Street, Leeds; 9 Sunny Mount, Keighley, Proposed by G. H. Foggitt, B. R. Gribbon and Major F. W. Moore. L: Arthur Forman Balfour, M.C., 16 Rutland Square, Edinburgh; Peffermill House, Craigmillar, Edinburgh, Proposed by Jn. Begg, James A. Arnott and John Wilson.

Poole: Francis Leonard, 34 Broadway, Westminster, S.W.1; 221 Knight's Hill, West Norwood, S.E.27. Proposed by A. E. Henderson, H. Yolland Boreham and Arthur G. Leighton. and the following Licentiate who is qualified under Section IV.

Clause 4 c (ii) of the Supplemental Charter of 1925:— Constanduros: Stephanos, 100 Lyndhurst Road, Peckham, S.E. Proposed by Ernest G. W. Souster, John Murray and W. H. Woodroffe.

AS ASSOCIATES (7)

Ayres: Norman David [Passed five years' course at the Welsh School of Architecture, The Technical College, Cardiff, Exempted from Final Examination.] 105, Newport Road, Roath, Cardiff, Proposed by E. C. Morgan Willmott, T. Alwyn Lloyd and Percy Thomas.

Briggs: John Wilfred, Dip.Arch.(Leeds) [Passed five years' course at the School of Architecture, Leeds College of Art. Exempted from Final Examination], Dolphin Hotel, Vicar Lane, Leeds, I.

Proposed by Joseph Addison, G. H. Foggitt and B. R. Gribbon. Crowther: James Leonard [Passed five years' course at the School of Architecture, Leeds College of Art. Exempted from Final Examination], 62 Wensley Drive, Chapel-Allerton, Leeds. Proposed by F. L. Charlton, John C. Procter and T. Butler Wilson.

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GOODDEN: ROBERT YORKE [Passed five years' course at the Architectural Association. Exempted from Final Examination], 47

tectural Association. Exempted from Final Examination], 47
Brood Street, Oxford. Proposed by Percival M. Fraser, L. Sylvester Sullivan and Geoffrey Norman.

PARKINSON: JOSEPH LESLIE [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], 48 Dovedale Road, Liverpool, 18. Proposed by Professor Patrick Abercrombie, Harold A. Dod and Edward R. F. Cole.

PRESTON: MISS CONSTANCE WINIFRED [Passed five years' course at the Architectural Association. Exempted from Final Examination], Hampton Court Palace, Middlesex. Proposed by Howard Robertson, E. Stanley Hall and J. Murray Easton.

UREN: REGINALD HAROLD [Final], 23 Belsize Park Gardens, Hampstead, N.W.3. Proposed by L. Rome Guthrie, W. B. Simpson and applying for nomination by the Council under the provisions of Bye-law 3(d).

AS LICENTIATES (10)

AS LICENTIATES (10)

BARD: RICHARD HENRY THOMAS, 3 Temple Gardens, E.C.4: 7
Argyll Gardens, Edgware, Middlesex. Proposed by W. Campbell Jones, Alec. Smithers and O. Campbell-Jones.

BRADSHAW: DONALD, c/o Herbert J. Rowse, Esq., Martin's Bank Building, Water Street, Liverpool; 18. Proposed by Herbert J. Rowse, Professor C. H. Reilly and T. E. Eccles.

CESCINSKY: HERBERT, 25 Mortimer Street, W.1; The Old House, Totteridge Green, N.20. Proposed by H. Courtenay Constantine and Austin Vernon, and applying for nomination by

stantine and Austin Vernon, and applying for nomination by the Council under the provisions of Bye-law 3(d).

Coldwell: Reginald, Borough Engineer's Office, 26 Ramsden Street, Huddersfield; 83 Wood Lane, Newsome, Huddersfield. Applying for nomination by the Council under the provisions of Bye-law 3 (d).

of Bye-law 3 (d).

Covves: Leonard James, Carliol House, Newcastle-on-Tyne; The Briggiss, North Avenue, Gosforth, Northumberland. Proposed by Sir, John J. Burnet, W. Lee Clarke and Robert Atkinson.

Ellis: Owen William Beresford, P.A.S.I., M.R.San.I., 11A College Hill, Cannon Street, E.C.4: Alleyn, The Ridge Way, Sanderstead, Surrey. Proposed by George Edw. Withers, John Dovaston and Gilbert H. Lovegrove.

Malone, Herry Salibbury, Department of Works and Public Buildings, Ministry of Finance, Law Courts, Belfast; 41 Cherry-valley Gardens, Knock, Belfast. Proposed by R. Ingleby Smith, R. H. Gibson and Kendrick Edwards.

R. H. Gibson and Kendrick Edwards.

Nelson: John Peel (Junior), 12 Southern Life Buildings, Main Street, Bulawayo; 55 Clark Road, Suburbs, Bulawayo, Southern Rhodesia. Proposed by W. D'Arcy Cathcart, Robert Howden and Gordon Leith.

Watson: James, c/o Aitchison, 170 Hope Street, Glasgow; "Woodburn," Portincaple, by Garelochhead, Dumbartonshire.
Proposed by T. Harold Hughes and the President and Secretary of the Royal Incorporation of Architects in Scotland under the provisions of Bye-law 3 (a).

wood: Neville Blackwell, Gisborne Crescent, Allestree, Derby, Proposed by G. Hanson Sale and the President and Hon. Secretary of the Nottingham, Derby and Lincoln Architectural Society under the provisions of Bye-law 3(a).

ELECTION OF MEMBERS

In accordance with the terms of Bye-laws 10 and 11 the following candidates for membership were elected at the Council Meeting held on Monday, 12 June 1933.

AS FELLOWS (4)

Chitale: Laxman Mahadeo, A.M.T.P.I. [A. 1924], Madras. Dawson: William Frederick [A. 1914], Leeds. Martindale: Christopher James Fawcett [A. 1921], Deal.

and the following Licentiate who is qualified under Section IV, Clause \pm c(ii) of the Supplemental Charter of 1925:— FREEMAN: FRANK RICHARD, Bolton.

AS ASSOCIATES (14)

BAILEY: ARTHUR [Final], Chislehurst,
BAZELEY: AILWYN GEOFFREY [Passed five years' joint course at the
School of Architectural Studies, Cambridge University, and the Architectural Association. Exempted from Final Examination],

Penzance.

Bromlow: Francis Edward [Passed five years' course at the Birmingham School of Architecture. Exempted from Final Examination], Alvechurch, near Birmingham.

Comber: Miss Eileen Eleanor [Passed five years' course at the

Architectural Association. Exempted from Final Examination], Windsor.

DARCH: JOHN THOMAS [Passed five years' course at the Welsh School of Architecture, The Technical College, Cardiff. Exempted

from Final Examination], Whitchurch, Glam.

DUNCAN: THOMAS NEWHALL [Special Examination], Johannesburg.

HUNT: ROBERT DENNIS [Passed five years' course at the Architectural

Association. Exempted from Final Examination], Tadworth.

LEDEBOER: MISS JUDITH GEERTRUD [Passed five years' course at the Architectural Association. Exempted from Final Examination]. Lewis: John [Passed five years' course at the Welsh School of Architecture, The Technical College, Cardiff. Exempted from Final

Examination], Caerphilly.

Lunn: Norman Sykes, B.Arch.(Lvpl.) [Passed five years' course at the School of Architecture, the University of Liverpool. Exempted from Final Examination], Huddersfield.

Maw: Miss Zoë Theodora [Passed five years' course at the Architectural Association. Exempted from Final Examination].

Scaffe: Edgar Frederick [Passed five years' course at the School of Architectural Victoria University. Manchester. Exampled of Architecture, Victoria University, Manchester. Exempted

of Architecture, Victoria Cinversity, Manchester. Exempted from Final Examination], Stockport.

SMETHURST: ARTHUR [Passed five years' course at the School of Architecture, Victoria University, Manchester. Exempted from Final Examination], Royton.

SPENCE: BASIL [Passed five years' course at the School of Architecture, Edinburgh College of Art. Exempted from Final Examination], Edinburgh

Edinburgh.

AS LICENTIATES (13)

COLE: JOSEPH CHARLES TROMASS, Birmingham. DANN: REGINALD, M.T.P.I. FOX: HENRY LESLIE, OSWESTY. GRIFFITHS: GORDON HERBERT, CARDIFF. HAY: ALFRED. HERRING: GEORGE HOWARD, Luton. MENDIS: AKANGAMA BADUGEY, A.R.C.A., Galle, Ceylon.
PETER: WILLIAM (Junior), Dip. Arch. (Abdn.), Aberdeen.
POVER: HARRY, Faversham. ROSSITER: DOUGLAS YEATMAN, Bromley.

Webb: John Leslie, Southborough. Young: Graham Conacher, Perth.

ELECTION OF STUDENTS R.I.B.A.

The following were elected as Students R.I.B.A. at the meet ing of the Council held on 12 June 1933. Anderson: Edith Mary Charlotta, 28 St. Gabriel's Road, Cricklewood.

CFICKIEWOOG.
ANGUS: FREDERICK GEORGE GRANT, 4 Devonshire Road, Aberdeen.
BARTLETT: HAROLD, 32 The Avenue, Bedford Park, London, W.4.
BERRY: MAURICE, 20 Beech Grove, Fallowfield, Manchester 14.
BOOTH: FREDERICK HARRY, "Sunniyside," Sawmills, Ambergate.
BRIGHT: GEOFFREY NEWNHAM, "Somersby," Oundle Drive, Nottingham.

BURNETT: LESLIE HOWARD, 36 Barndale Road, Mossley Hill, Liverpool 18.

pool 16.
CORFIATO: HECTOR, 121 Willifield Way, London, N.W.11.
CRANE: YVONNE, "Vellator," 43 Coolhurst Road, Crouch End, N.8.
CHRISTIE: MAXWELL FORDYCE, 3 Hammersmith Road, Aberdeen.
EMSLIE: CHARLES RITCHIE, 6 Roseberry Street, Aberdeen.

FURNISS: MARTIN DUMVILLE, 6 Broomhill Road, Woodford Green, Essex

GALLOWAY: ERIC MELVIN, Oldmanse, Brechin, Angus.

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GREENWOOD, JOHN WILMOT, West Town, nr. Bristol.

HAMP: ESTHER MARY, 19 Russell Road, Kensington, W.14, HARKNESS: JOHN CAM, 10 Greenway, West Berkhamsted, Herts. HURLEY: LOUIS FREDERIC, "Brynhenlog," Crickhowell, Breconshire. McManus: Philip Edward, 57 Joppa Road, Portobello, Mid-

MARSHALL: ARTHUR CECIL, 28 Woodward Road, Mt. Albert, Auckland, New Zealand.

MENZIES: CHARLES ALEXANDER, Culdares, Aberfeldy.

Messenger: Robert Michael Veitch, The Hut, Hillboro ah Road Herne Bay.

MOFFATT: JOHN ALLAN, "Kenmure," Aigburth Drive, Schon Park,

Liverpool 17.
Neish: Robert, 9 Ardross Terrace, Inverness.
Norris: Marcus Hope, 18 Margaret Street, London, W.1.
Walls: Herbert Forrest, "Westwood," Chester Road, Gayton,

WATT: GEORGE MILNE, 85 Cromwell Road, Aberdeen.

Notices

BRITISH ARCHITECTS' CONFERENCE, CAMBRIDGE 21-24 JUNE 1933

Final arrangements for all the events of the Conference are now being made. It is hoped that all members and students who have not already done so will at once refer to the programme sent to them with the issue of the Journal for 29 April and send in their names without delay for such of the events as they desire to take part in.

Members of the R.I.B.A. and the Allied and Associated Societies who are officials of local authorities will be cordially welcomed as delegates to the Conference.

The Railway Companies in Great Britain have agreed to issue cheap tickets to Cambridge, available from 17 to 27 June inclusive, at the ordinary single fare and one-third for the double journey, to members and their friends who attend the Conference.

Members who desire to take advantage of this special reduced fare concession must present at the booking office a signed voucher to be previously obtained from the Secretary R.I.B.A.

ARCHITECTS' CAMP

It is proposed to hold a camp for men members of the Conference, should they prefer this method of spending the few days in Cambridge to that of staying at a hotel or in rooms.

Apart from the fact that a considerable saving would be incurred by this method, it is also pointed out that by mingling in camp an excellent opportunity is given for forming acquaintances and friendships.

The camp will last from Wednesday, 21 June, till Saturday, 24 June, inclusive.

1. Site.—The camp site, which is served by 'bus routes, is in the grounds of Trumpington Hall, just two miles from the centre of Cambridge.

There will be adequate latrine and washing accommodation, the camp being staffed by Cambridge University Rover Scouts.

- 2. Motor Cars. Campers' private cars may be brought on to the site, but they cannot be kept under cover
- 3. Bathing.—There is bathing in the River Granta, which adjoins the camp site.
- 4. Meals.-It is anticipated that campers will prefer to get their meals in Cambridge; thus only Breakfast will be provided at a reasonable charge.
- 5. Tents.—Tent accommodation can be provided (i.e., tents holding up to 4 or 6, or even more). It will greatly ASSIST IF CAMPERS WILL BRING THEIR OWN TENTS—"HIKE" OR OTHERWISE—IF THEY OWN THEM.
- 6. Charges.-Owing to the fact that numbers of campers are unknown it is not possible to state the amount of the charges, but this will be of the minimum and payable at the camp.

Charges will be due to: Organisation, Hire of Equip. ment, Breakfasts, 2s. 6d. booking fee in advance.

- 7. Suggested Camp Gear (not inclusive).—Own tent (if possible). Ground sheets. Blankets or Sleeping-bags. Plates, mug, knife, fork, spoon.
- 8. Intending Campers.—Will those wishing to attend the camp kindly forward immediately the following information to the Camp Chief.
 - 1. Date of arrival. 2. Date of departure.
 - 3. Will you be bringing your own tent?
 - 4. If your own tent is to hold more than yourself, please include names together.
 - 5. If you require tent accommodation for a party, please include names together.
 - 6. Will you require space in the camp car park? The above information should be accompanied by a booking fee of 2s. 6d. per head, which cannot be returned in the event of non-attendance, but will be deducted from the camp charges.

All correspondence with regard to the Architects' Camp to be addressed to the Camp Chief: Peter Burton, Esq., B.A., co H. C. Hughes, Esq., M.A., F.R.I.B.A., Tunwell's Court, Trumpington Street, Cambridge.

R.I.B.A. NEW BUILDING

The Rt. Hon. Lord Howard de Walden (Hon. Fellow) has kindly agreed to lay the foundation stone of the new R.I.B.A. building, and the ceremony will take place at 3 p.m., on Wednesday, 28 June.

The accommodation for those wishing to attend the ceremony will be limited, and admission will be by ticket only. Tickets will be allotted to members in order of application, and those who wish to attend the ceremony are therefore requested to apply to the Secretary at an early date.

AMENDMENTS TO R.I.B.A. BYE-LAWS

We print below a copy of a notification that has been received from the Privy Council approving the amendments which were approved at the Special General Meetings held on 24 April and 8 May 1933 :-

> AT THE COUNCIL CHAMBER, WHITEHALL, The 16th day of May 1933.

By the Lords of His Majesty's Most Honourable Privy Council.

WHEREAS the Royal Institute of British Architects has at a Special General Meeting in exercise of the powers in that behalf conferred on it by the Supplemental Charter dated the 28th day of March 1887, by Resolutions of the 24th April 1933, made certain amendments to the Bye-laws of the said Institute; which Resolutions were confirmed at a Special General Meeting on the 8th May 1933:

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AND WHEREAS by Article 33 of the said Supplemental Charter itis provided no Bye-laws shall be of any force or validity whatever unless and until they have been approved by the Lords of the Council:

AND WHEREAS the said amendments of Bye-laws have been submitted to the Lords of the Council for allowance:

NOW. THEREFORE, Their Lordships, having taken the said amendments of Bye-laws into consideration, are pleased to allow the same as set forth in the Schedule to this Order.

M. P. A. Hankey.

SCHEDULE

AMENDMENTS OF THE BYE-LAWS OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

(1) Insert the words "an Honorary Treasurer" after the word "Secretary" in Bye-law 28 (a); the words "the Honorary Treasurer" after the word "Secretary" on line three of Bye-law 34; the words "or Honorary Treasurer" after the word "Secretary" in the tenth line from the end of Bye-law 35; and the words "or of the Honorary Treasurer" after the words "Honorary Secretary" in the tenth line

of Bye-law 36.
(2) The following new Bye-law, to be numbered 31(a), to be

inserted after the existing Bye-law 31:—
"31(a). The Honorary Treasurer shall be eligible to be reelected from year to year provided that no Honorary Treasurer who has filled the office for six successive years shall be eligible for re-election as Honorary Treasurer until the expiration of two years from the termination of his tenure of office.

OVERSEAS APPOINTMENTS

When members are contemplating applying for appointments overseas they are recommended to communicate with the Secretary R.I.B.A., who will supply them with any available information respecting conditions of employment, cost of living, climatic conditions, etc.

MEMBERS' DANCE

MONDAY, 26 JUNE 1933

A Dance has been arranged by the Social Committee to take place in the R.I.B.A. Galleries on Monday, 26 June. com-

Tickets, price 6s. each, inclusive of light refreshments, can be obtained on application to the Secretary R.I.B.A., 9 Conduit Street, W. I.

ROME SCHOLARSHIP IN ARCHITECTURE

EXHIBITION OF FINAL COMPETITION DESIGNS

The designs submitted in the Final Competition for the Rome Scholarship in Architecture will be on exhibition in the Galleries of the Royal Institute of British Architects, o Conduit Street, W.1, between the hours of 10 a.m. and 8 p.m. (Saturdays 10 a.m. and 5 p.m.) from 21 June to 1 July 1933.

The scholarship is provided by the Royal Institute of British Architects, which makes a grant of £750 a year to the British School at Rome. It is awarded by the Faculty of Architecture of the British School at Rome, and is keenly contested annually by the most brilliant students selected from the various Architectural Schools in the country. The scholar is required to go to Rome to study for a period of two or three years at the British School at Rome.

This year the subject of the competition was "A Road House." Eleven students, drawn from the following Schools,

took part:-

The Bartlett School of Architecture, University of London. The School of Architecture, The Architectural Association, London.

The Armstrong College School of Architecture, University of Durham.

The Liverpool School of Architecture, University of Liverpool.

The School of Architecture, University of Manchester. The School of Architecture, Edinburgh College of Art.

Competitions

BELFAST: NEW SANATORIUM BUILDINGS

The Belfast Education Committee are proposing to hold a competition for new Sanatorium buildings at Whiteabbey and Graymount and Mr. R. S. Wilshere [A.] has been appointed to act as Assessor. Conditions are not yet available.

HORNSEY: NEW TOWN HALL

The Hornsey Town Council invite architects of British nationality to submit in competition, designs for a new Town

Assessor: Mr. C. Cowles-Voysey [F.].

Premiums: £350, £250 and £150. Last day for receiving designs: 23 September 1933.

Last day for questions: 30 May 1933.

SLOUGH: NEW COUNCIL OFFICES The Slough Urban District Council have decided to hold an open competition in connection with the new Council Offices which are to be erected at Salt Hill. Premiums of £150, £100 and £50 will be offered and Mr. H. S. Goodhart-Rendel [F.] has been appointed by the President of the R.I.B.A. to act as Assessor. Conditions have not yet been drawn up.

STOKE NEWINGTON: MUNICIPAL BUILDINGS

The Council of the Metropolitan Borough of Stoke Newington have authorised the holding of a competition for Municipal Offices and extensions to the Library and Electricity Offices. Conditions have not yet been drawn up.

COMPETITION RESULTS

Portstewart: New Municipal Buildings

Mr. Benjamin Cowser [A.], Belfast. Prestwick, Ayrshire: Burgh Chambers, etc.

1. Mr. R. Mervyn Noad [A.], Glasgow. 2. Messrs. Wylie, Wright and Wylie [A., L. and A.], Glasgow.

3. Messrs. Kininmonth and Spence [AA.], Edinburgh.

Members' Column

PRACTICE FOR SALE

Architect [F.] has small general practice for disposal, established nine years. Suit young architect commencing. Apply Box No. 7533, c/o Secretary R.I.B.A.

PARTNERSHIP OR PRACTICE WANTED

Associate (25 years, standing) desires to acquire a Partnership or ultimately practice, preferably London, or Counties south of the Midlands, where there is work in hand—has likely clients in London and Home Counties. Communications to Box No. 8633, c/o Secretary R.I.B.A.

PARTNERSHIPS WANTED

Young A.R.I.B.A. desires Junior Partnership in well-connected firm (capital available); home or abroad; modern school trained, experience in offices and own practice, special study of housing. Write, with particulars, Box No. 1263, c/o Secretary R.I.B.A.

A PARTNERSHIP is wanted in a well-established practice. Substantial sum available. Box No. 3053, c'o Secretary R.I.B.A.

SUCCESSION TO PRACTICE

Mr. F. R. Elleray [A.] has changed his business address to Dane Chambers, Dane Street, Northwich, where he has taken over the practice of the late Mr. Alfred Williamson.

CHANGE OF ADDRESS

Dr. J. Stübben [Hon. Corresponding Member for Germany] has changed his address to Städelstrasse 4, Frankfort-am-Main.

Minutes XVII

Session 1932-1933

At the Twelfth General Meeting of the Session, 1932-1933, held

on Monday, 12 June 1933, at 8 p.m. Sir Raymond Unwin, President, in the Chair.

The attendance book was signed by 33 Fellows (including 17 Members of Council), 15 Associates (including 3 Members of Council), and 8 Licentiates (including 2 Members of Council).

The Minutes of the Tenth General Meeting, held on 22 May 1933, having been published in the JOURNAL, were taken as read, confirmed and signed as correct.

The Hon. Secretary announced the decease of:—
John Coulson Nicol, elected Associate 1887, Fellow 1918.
Walter Reid, elected Fellow 1906.

Frank Worthington Simon, elected Fellow 1902, transferred

to Retired Fellowship 1933. Mr. Simon was Tite Prizeman in 1887

Charles James Clark, elected Associate 1893. Leslie Burnett Ward, elected Associate 1932.

and it was Resolved that the regrets of the Institute for their loss be entered on the Minutes and that a message of sympathy and condolence be conveyed to their relatives.

The following members, attending for the first time since their election, were formally admitted by the President:—

F. de J. Clere [F.].

R. Ashton [A.]

J. J. de Segrais [A.]. J. W. Corney [L.].

James W. Mayhew [L.], Leonard F. Smith [L.].

R. W. Voller [Student] The Scrutineers' Report, giving the results of the Annual Elections

of the Council, Standing Committees and Hon. Auditors, was read. The President declared the Officers, Members of Council, the Standing Committees and the Hon. Auditors duly elected in accordance therewith.

On the motion of the President, a vote of thanks was passed by acclamation to the Scrutineers for their labours in connection with

the elections This concluded the business of the Ordinary General Meeting.

Minutes XVIII

Session 1932-33

At a Special General Meeting held on Monday, 12 June 1933, immediately following the Ordinary General Meeting above recorded and similarly constituted, the President announced that the meeting had been called for the purpose of confirming the following resolutions passed at the Special General Meeting held on Monday, 22 May 1933:

(1) That in Bye-law 28(j) the words "the R.I.B.A. Registration Committee" be deleted, and the words "the Architects' Registration Council of the United Kingdom" be inserted.

(2) That the necessary steps be taken to obtain the sanction of the Privy Council to such amendment to the Bye-law as required to give effect to the foregoing resolution.

17 June 1933

On the motion of the President, seconded by the Hon. Secretary, it was unanimously Resolved that these resolutions be confirmed.

The formal business of the Special General Meeting hiving con-cluded the President invited members to join in a private and informal discussion on subjects of professional interest or difficulty. The proceedings closed at 8.30 p.m.

A.B.S. INSURANCE DEPARTMENT HOUSE PURCHASE SCHEME. (For property in Great Britain only.) REVISED TERMS.

The A.B.S. Insurance Department is able, through the services of a leading Assurance Office, to assist an Architect or his Client in securing the capital for the purchase of a house on the following terms:-

Amount of Loan.

75 per cent. of the value of the property as certified by the Surveyor employed by the Office.

RATE OF INTEREST.

5 per cent. gross (which, at the present rate of income tax, represents 33 per cent. nett).

LEGAL COSTS AND SURVEY FEE,

also the amount of the first quarter's premium on the Endowment Assurance referred to below, are advanced in addition to the normal loan. If the loan is continued for more than fifteen years the Survey and Legal Costs will be refunded to the Borrower on repayment of the loan.

REPAYMENT.

By means of an Endowment Assurance which discharges the loan at the end of 15 or 20 years or at the earlier death of the Borrower.

SPECIAL CONCESSION TO ARCHITECTS.

In the case of houses in course of erection, it has been arranged that provided the Plan and Specification have been approved by the Surveyor acting for the Office, ONE-HALF of the amount of the loan agreed upon will be advanced on a certificate from the Office's Surveyor that the walls of the house are erected and the roof on and covered in to his satisfaction.

N.B.—Loans will not be undertaken under this scheme upon: (a) Property the value of which is not sufficient to warrant a loan of at least £500 or of which the value

exceeds £2,500; Property of the bungalow type;

Property not in the sole occupation of the Borrower.

If a quotation is required, kindly send details of your age next birthday, approximate value of house and its exact situation, to the Secretary, A.B.S. Insurance Department, 9 Conduit Street, London, W.1. Telephone: Mayfair 0434.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expressions of the Institute.

R.I.B.A. JOURNAL

Dates of Publication .- 1933: 8, 22 July; 5 August; 9 September; 14 October.

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